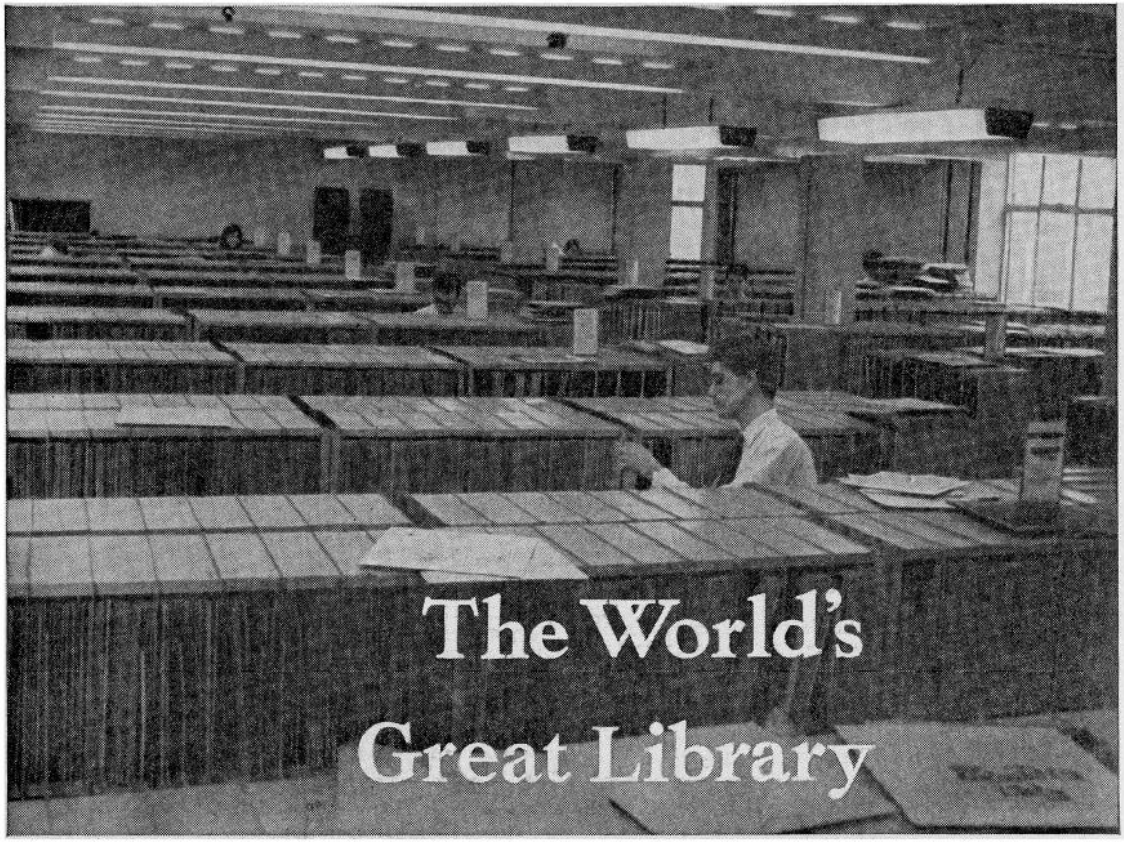
WORLD RADIO TV HANDBOOK

1967 · 21 st. Edition

The complete directory
and basic reference guide of
international radio and
television

*

Including short wave, medium wave & TV stations with frequencies, programs, world maps, and other data. Complete index on page 10



# of Sound Radio

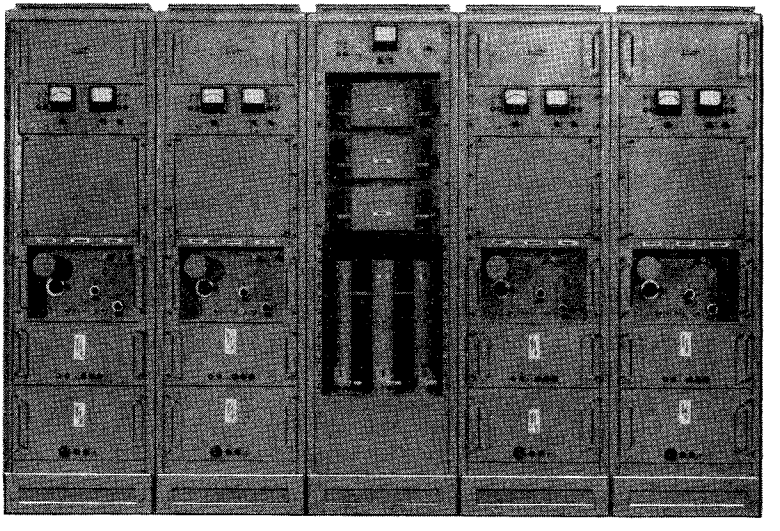
Music from outstanding BRITISH FESTIVALS
Stars of the English stage in WORLD THEATRE
SERIOUS AND LIGHT MUSIC
COMEDY SERIES
POPULAR PLAYS
BROADCASTS FOR CHILDREN
MAGAZINE PROGRAMMES

BBC

BBC TRANSCRIPTION SERVICE
Kensington House
Richmond Way, London W14 England

TV AND VHF FM TRANSMITTERS AND TRANSPOSERS

100 mW (transistorized) to 1,5 kw.



FM transposer 125 watts - 3 channels - Triplexer

- **RADIO-LINKS**
  40 to 2000 mc/s
- **AERIALS**
  Yagis - Corners - Reflectors - Panels
- **MISCELLANEOUS**
  Combiner Units - Cavities - Filters
- **RADIOTELEPHONES**
  base - mobile - portable stations
  Bands : 40 - 80 - 100 - 450 mcs
- **AIR-BORNE VHF TRANS-RECEIVERS "NAVCO"**
  480 channels
- **CLOSED CIRCUIT TELEVISION** Caméras - Monitors

LABORATOIRE GÉNÉRAL DE TÉLÉCOMMUNICATIONS

4, rue de Garches (92) Saint-Cloud - France - Tél. : 408-50-15

Equipment used by French and European Broadcasting Networks

PREFACES

P. W. R. Homfray

It is a privilege to contribute a preface on behalf of Radio Australia for this 21st Anniversary Edition. WRTH continues to provide broadcasters throughout the world with the most comprehensive and up-to-date information on all aspects of radio and television development; it is an invaluable reference book.

WRTH is one of Radio Australia's meeting points with other short wave broadcasters. I would like to take this opportunity of giving your readers some idea of our approach to broadcasting.

Firstly, when we say that Radio Australia is the "Voice of Australia" we mean it in a very special sense. Although financed by the Government, Radio Australia is not a department of the Government. It is the Overseas Service of the Australian Broadcasting Commission which is a body set up under a Federal Act to provide comprehensive programmes in radio and television throughout Australia.

The Commission formulates the policies under which all its programmes are presented, both at home and overseas.

The Government view on different controversies is presented but not in a vacuum as if it were the only view in Australia.

Radio Australia's news bulletins and its programmes of comment reflect the fact that there are differences of opinion in Australia and that debate is a vital element in our national life.

Radio Australia's news service is the most quoted radio news source in South-East Asia – a great tribute to its reliability. Over the years we have built up a reputation for detached reporting – and our success depends on that reputation being maintained.

Each day Radio Australia broadcasts 46 news bulletins – 31 in English, 6 in Indonesian, 2 in Mandarin, 3 in French and 1 each in Cantonese, Vietnamese, Thai and Japanese. The bulletins are prepared by the Australian Broadcasting Commission's news staff using overseas cable services and its own network of staff correspondents. The A.B.C. maintains staff representatives in Singapore, Kuala Lumpur, Djakarta, Saigon, Delhi, Tokyo, London and New York.

Talks programmes are an important feature of Radio Australia's broadcasting, providing up-to-the-minute background for world news in programmes entitled "News Focus" and "Commentary"; also presenting a broad picture of Australian life in "This Australia" and "The Creative Arts" programmes.

"News Focus" is a news-magazine style programme, based primarily on voiced reports from the A.B.C.'s own overseas representatives. "Commentary" is given by a panel of independent commentators – usually journalists or academics.

Entertainment is also a vital part of our programming, with such shows as "Listeners' Choice", "Listeners' Mailbag" and lively personality programmes. "Listeners' Choice" is a programme of request music featured daily in English-language and all foreign-language broadcasts. "Listeners' Mailbag" is Radio Australia's "Encyclopaedia of the Air" in which listeners' questions are answered on air.

Another big source of letters is requests for the free booklets which accompany Radio Australia's popular English-language teaching programmes for Indonesians – "English for You" – and Thais – "English for Thailand".

It is impossible to know exactly how many listeners Radio Australia has. There is evidence that the number runs to tens of millions, the majority of them living in Australia's near north – in South and South-East Asia.

Radio Australia broadcasts 55 hours a day – 41½ in English, 5½ in Indonesian, 2 each in Mandarin and French and 1 each in Thai, Vietnamese, Cantonese and Japanese.

There is a strong emphasis on broadcasts to Asia, Africa and the Pacific, with a specialised news coverage for these areas.

The reason for this emphasis is that these countries are our nearest neighbours and most of our listeners live there.

However, our message does go right around the world. We have regular listeners in the United States, Denmark, Norway, Sweden, the United Kingdom, Germany, the West Indies, and a dozen other countries. Like our nearer-to-home listeners, they have come to regard Radio Australia as a friend. They keep us in touch with their family news and send us pictures of their activities.

Mail comes into our office in Melbourne with souvenirs from overseas listeners: perhaps a home-town photograph from a listener in Denmark, a necklace of shells from a girl in the Pacific Islands, or a photograph from a seaman showing us his cabin with a short-wave set by the bunk.

Apart from our integrity as a source of reliable information about world events, it is this warm relationship with our listeners which we most value.

Our listeners know our announcers. They write to them and get replies from them. We send out fan cards by the score.

So Radio Australia means different things to different people. To some it is a lifeline of accurate news, to others it is an encyclopaedia of the air or a way of keeping up-to-date with the best in music, modern or classical. To others still, it is a friendly voice they like to hear. Perhaps it is all these things to many, because that is our aim.

P. W. R. HOMFRAY
Director of Radio Australia

Hans Otto Wesemann

When the Deutsche Welle was first mentioned in the "World Radio and TV Handbook", the title of this extremely useful reference book did not include the "TV", and the modest beginnings of the Deutsche Welle were just a year old. That was in 1954. Since then, both the "World Radio and TV Handbook" and the Deutsche Welle have each in their own way expanded considerably. It is not for me to describe here the progress made in the intervening period by the Deutsche Welle; this can be

neumann condenser microphones

COMPLETE STEREO AND MONO DISK CUTTING EQUIPMENT

TRANSISTOR MIXING CONSOLES

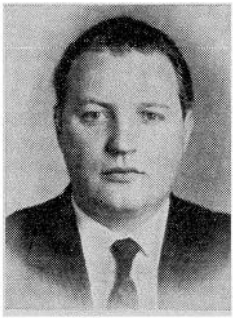
Write for details on our complete manufacturing program

retraced by referring to the appropriate pages in the Handbook itself. I should add, however, that the last three years have been particularly important in the development of the Deutsche Welle. The foreign language programmes have been extended appreciably, the transcription service has grown and now supplies recordings to a large number of countries, the German language series "Lernt Deutsch bei der Deutschen Welle" is now available in 14 languages, and a relay station has gone into operation.

Outwardly there have been quite a few changes. However, the aim of the Deutsche Welle has remained the same – to present an undistorted picture of all aspects of life in the Federal Republic of Germany. That this is now being done in a wide variety of foreign languages is part of the endeavour to promote international understanding. Understanding presupposes knowledge. Knowledge of one's partner in conversation, which is the role in which we cast ourselves vis-à-vis our listeners, is best obtained from him himself.

The importance attached in this connection to the modern means of communications throughout the world and the efforts being made to reach and converse with the listener, wherever he may live – this is reflected on every page of the "World Radio and TV Handbook".

Dr. HANS OTTO WESEMANN
Intendant, Deutsche Welle, Köln



M. Monusov
Head of International Relations Department
Soviet Radio and Television

The Russian people used to say: "The road is twice as long with a silent companion". Today this proverb only holds true if you have forgotten your transistor radio at home, or neglect to turn on the set beside you. You won't be annoyed at having a bore or a clam beside you if you tune in to Radio Moscow. No matter what your mood, intellectual requirements or professional interests, you'll always find something to suit you in our programs.

We keep our listeners informed about events in their own and other countries; run preparatory courses for those wishing to enter college; and organize music appreciation programs, foreign language lessons and talks on space research. Listeners are prompt to remind us if we leave something out in drawing up our programs. We receive tens of thousands of letters from listeners in the Soviet Union and abroad, for Radio Moscow beams broadcasts in 55 languages to other countries. So much for our relation with our listeners.

Now for our business relations with radio and TV stations in other lands. We exchange radio programs with 130 stations in 83 countries; 65 tv stations in 55 countries use our tv programs. Our colleagues in the United States, Canada, Britain, France and a host of other countries come to Moscow to swap experiences, agree on exchanges of programs and personnel and broaden the sphere of cooperation.

The Soviet Committee for Radio and Television is a member of the International Radio and Television Organization – OIRT. Because of its extensive correspondence, our international department has constant need of information of all sorts and finds the World Radio TV Handbook invaluable. It contains much useful information and helps us in making business contacts which often develop into friendly relations. To my mind, those who help people to work and be friends are engaged in a very useful and humane function. It is why we are grateful to the compilers of this excellent Handbook.

M. MONUSOV
Head of International Relation Department
Soviet Radio and Television

Eino S. Repo

As a matter of fact it was the television which brought about the lively intercourse between nations in the area of the media of communications in the ether. This intercourse has now reached such dimensions that we are constantly in need of information on radio and television organisations very far from our country. The sound radio, which before the marching forth of the television was not able to use, even nearly to the full, all the possibilities to be found in the international programme production and the technical development, is at present enjoying, as a good second, the international company.

Only ten years ago very few people could foresee the highly developed international collaboration in programme activities that now belongs to our daily experiences and where the WORLD RADIO TV HANDBOOK is of valuable assistance. As far as Finland is concerned, the collaboration with other countries is exceptionally frequent and solid; the Yleisradio is a member not only of the EBU but also of the OIRT and closely connected with the Scandinavian broadcasting organisations, thus participating in Eurovision, Intervision and Nordvision. In my opinion the internationalism in the field of programme activities will make still further progress, and as soon as the existing prejudices break down, it will be of global significance.

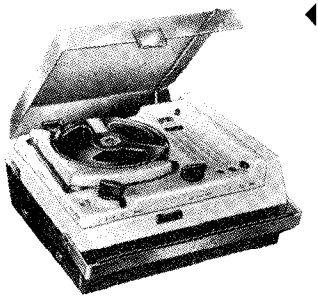
EINO S. REPO
Director-General, Finnish Broadcasting Co.

Rosel H. Hyde

The World Radio TV Handbook is a publication which has developed rapidly into one of the leading and most often consulted authorities on world-wide broadcasting activities. The comprehensive treatment given AM, FM and TV stations makes this publication a valued and respected source of information by providing readily understandable and necessary facts to tune in stations of almost all countries. The Handbook thereby provides the opportunity for its users to share in the cultures of many nations and plays a significant role in promoting better international understanding.

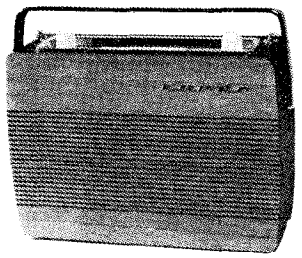
ROSEL H. HYDE
Chairman, Federal Communications Commission
Washington, D.C., USA

New advanced Line in Music Entertainment



MULTICORDER

This portable transistorized tape recorder has entirely new constructions in elegant design. 1 knob for immediate choice of 4 programmes. Single reel. 12 hours playing time. Supreme HiFi quality of tone. Battery operated and outlets for mains adaptor. For use everywhere, also in cars.

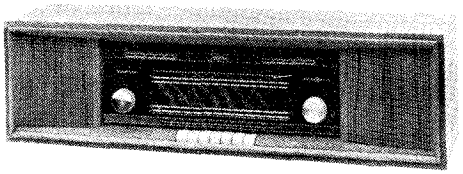


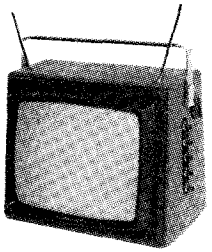
KURER FM DE LUXE in teak

This elegant portable AM/FM model has 4 wavebands. Highest sensitivity and selectivity are the features. Stable reception on FM with AFC. Outlets for mains adaptor, extra speakers and earphones. Special combined models for cars available. Smart cabinets in teak, palisander, black/nickel and pastel colours.

SYMPHONY STEREO

This handsome designed table model has 5 wavebands incl. FM. Two STEREO amplifiers of 2 × 10 Watts output give excellent quality of tone. Transistors and tubes, 4 highly efficient loudspeakers ensure a genuine reproduction of Stereophonic Sound. Tone selector key board. Outlets for pickup, extra speaker etc. Outlets for MPX. A special section model also available with extra speaker cabinets, designed to fit into shelf sections. The SYMPHONY STEREO table model can be converted into a smart floor model, incorporating a high quality record-player in a drawer.

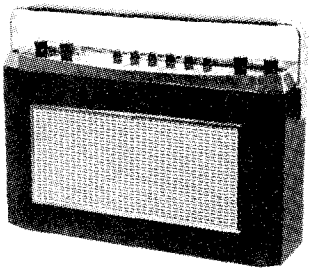




KURER 11" portable fully transistorized TV

This compact TV of highest quality in elegant teak cabinet is built for especially difficult reception conditions. Gives sharp picktures and brilliant sound reproduction, in the home, on the beach, whereever you are. Mains/battery operated.

EXPLORER



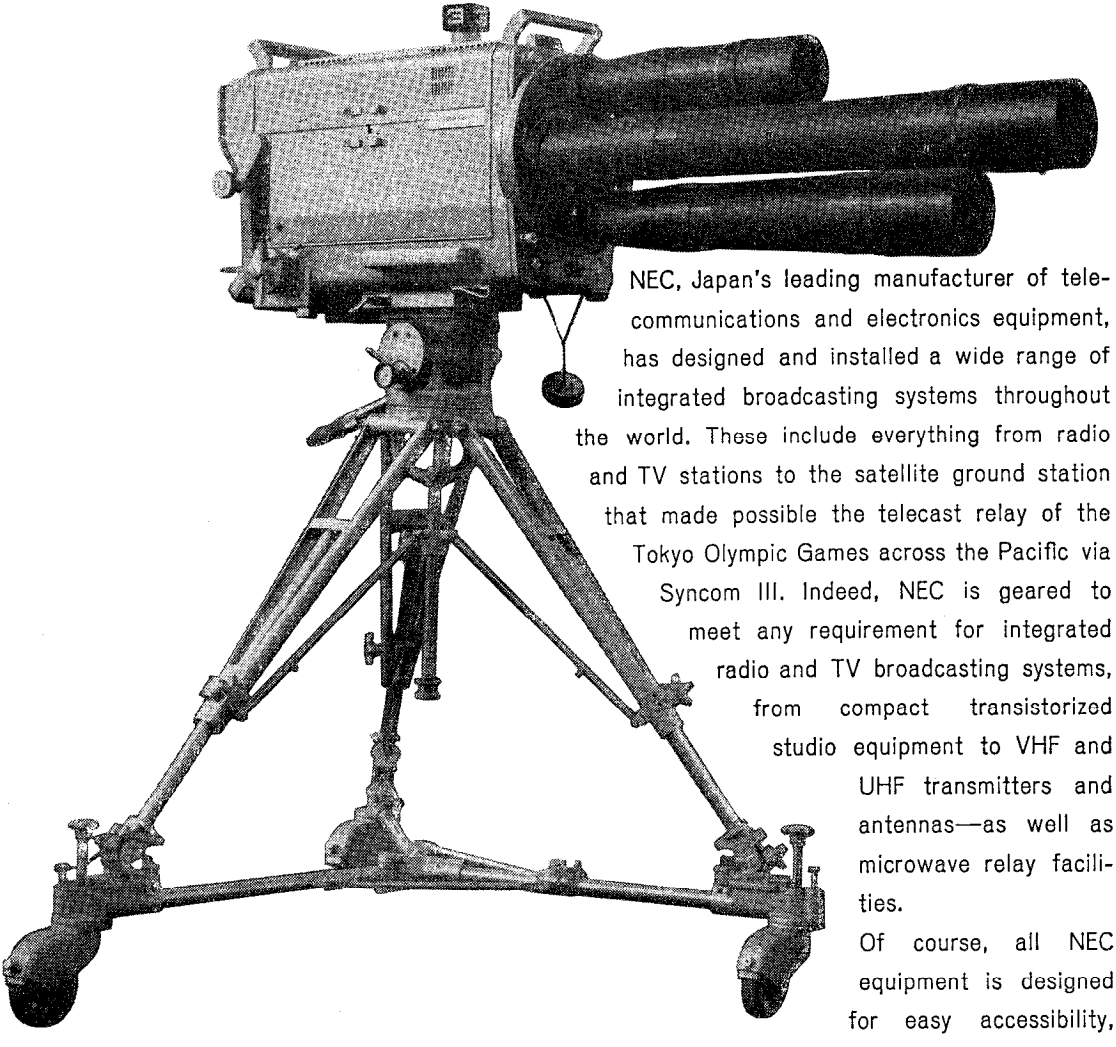
This is a highly sensitive, portable, battery-operated AM-radio with 3 shortwaves plus medium and long. An all over the world radio receiver.

EXPLORER is beautifully finished in a vinylite covered wooden cabinet - to give the best possible sound reproduction. It has 2 built-in highly effective loop antennas for shortwave bands and ferrite antenna for long- and medium. Great sensitivity, which makes it possible to take in faraway stations. Separate, continuous bass and treble controls. Dial lamps. Outlets for extra loudspeaker, pickup, antenna and ground. Outlet also for battery eliminator for AC mains operation. Modern printed circuit chassis with large speaker gives clear and powerful output.
5 wavebands: Shortwave III 11-29,5 Mc - Shortwave II 5,3-14,5 Mc - Shortwave I (Marine) 1,7-5,2 Mc - Medium wave 510-1630 Kc - Longwave 150-390 Kc.
Weight: 1,8 kilos + batteries - Special model with FM band is also available.

RADIONETTE has 40 years of experience on technical improvements of highest quality. The production line consists of portable radios, table- and console models, TV, tape recorders, amplifiers and mini-jukeboxes – all models great news for music lovers. Exports to 60 countries. Developped and produced by RADIONETTE, Norway.

RADIONETTE TRONDHEIMSVEIEN 100 OSLO 5 NORWAY

NEC's wide range of integrated broadcasting systems—geared to meet any demand anywhere!



NEC, Japan's leading manufacturer of telecommunications and electronics equipment, has designed and installed a wide range of integrated broadcasting systems throughout the world. These include everything from radio and TV stations to the satellite ground station that made possible the telecast relay of the Tokyo Olympic Games across the Pacific via Syncom III. Indeed, NEC is geared to meet any requirement for integrated radio and TV broadcasting systems, from compact transistorized studio equipment to VHF and UHF transmitters and antennas—as well as microwave relay facilities.

Of course, all NEC equipment is designed for easy accessibility, simple maintenance and minimum power consumption. It meets the highest international broadcast standards of signal quality, stability and reliability such as FCC, CCIR, etc. At present, sixty percent of the more than seven hundred eighty radio stations in Japan are supplied with NEC equipment.

Products for today—
Innovations for tomorrow

NEC

Nippon Electric Company Limited P. O. Box 1, Takanawa, Tokyo, Japan

For the promotion of a better understanding between the peoples of the world:

Recommended by:
United Nations – UNESCO – European Broadcasting Union – International Radio and Television Organization (O.I.R.T.), Prague – International Broadcasters Society (IBS).

AUSTRALIA: Australian Broadcasting Commission (incl. Radio Australia).
AUSTRIA: Österreichischer Rundfunk.
BELGIUM: The Belgian National Broadcasting Service.
BURMA: Burma Broadcasting Service.
CANADA: Canadian Broadcasting Corp.
CYPRUS: Cyprus Broadcasting Corp.
CZECHOSLOVAKIA: Radio Prague.
DENMARK: Radio Denmark.
EIRE: Radio Eireann.
FINLAND: The Finnish Broadcasting Co.
FRANCE: R.diff. Télévision Française.
GERMANY: Deutsche Welle – Bayerischer Rundfunk – Hessischer Rundfunk – Nord- u. Westdeutscher Rundfunk – Süddeutscher Rundfunk – Südwestfunk – Radio Saarbrücken.
GERMAN DEM. REP: Staatliches Rundfunkkomitee – Radio DDR – Deutschlandsender – Berliner Rundfunk – Berliner Welle – Radio Berlin International.
GHANA: Ghana Radio and Television Corp.
GREAT BRITAIN: British Broadcasting Corporation.
GREECE: National Broadcasting Institute.
HOLLAND: Radio Nederland Wereldomroep.
HUNGARY: Hungarian Broadcasting Sce.
INDIA: All India Radio.
INDONESIA: Radio Republik Indonesia.
IRAN: Radio Tehran.
ISRAEL: Israel Broadcasting Service.
ITALY: RAI – Radiotelevisione Italiana.
JAPAN: NHK – Radio Japan.
MALAYSIA: Radio Malaysia.
NEW ZEALAND: New Zealand Broadcasting Service.
NIGERIA: Nigerian Broadcasting Corp.
NORWAY: Norsk Rikskringkasting.
PAKISTAN: Radio Pakistan.
POLAND: Polskie Radio i Telewizja.
PORTUGAL: Emissora Nacional.
RUMANIA: Radio Bucharest.
SAUDI ARABIA: Saudi Arabia Broadc.
SPAIN: Radio Nacional de España – Sociedad Española de Radiodifusion – Red de Emisoras del Movimiento.
SWEDEN: Swedish Broadcasting Corp.
SWITZERLAND: Swiss Broadcasting Corp.
TURKEY: Radio Ankara.
SOUTH AFRICA: South African Broadcasting Corp.
USA: The Voice of America – Radio New York Worldwide (WNYW).
USSR: The State Committee for Broadcasting and Television.
VATICAN STATE: Vatican Radio.

The Editor of the World Radio Television Handbook seeks information from all stations and organizations engaged in broadcasting and/or television and interested in international broadcasting and/or television and publishes the information as communicated to him by the stations or organizations. The Editor cannot be held responsible for the correctness of this information or for not publishing schedules and other particulars of stations which do not supply this information, or for changes in the times and wavelengths of programmes made after the current edition has gone to press.

WORLD RADIO TV HANDBOOK

RADIO

TELEVISION

1967

★

Published by

WORLD RADIO-TELEVISION HANDBOOK CO. Ltd.
Sundvej 6
Hellerup, Denmark

★

O. Lund-Johansen
Founder and Publisher 1947–1964

★

21st edition

★

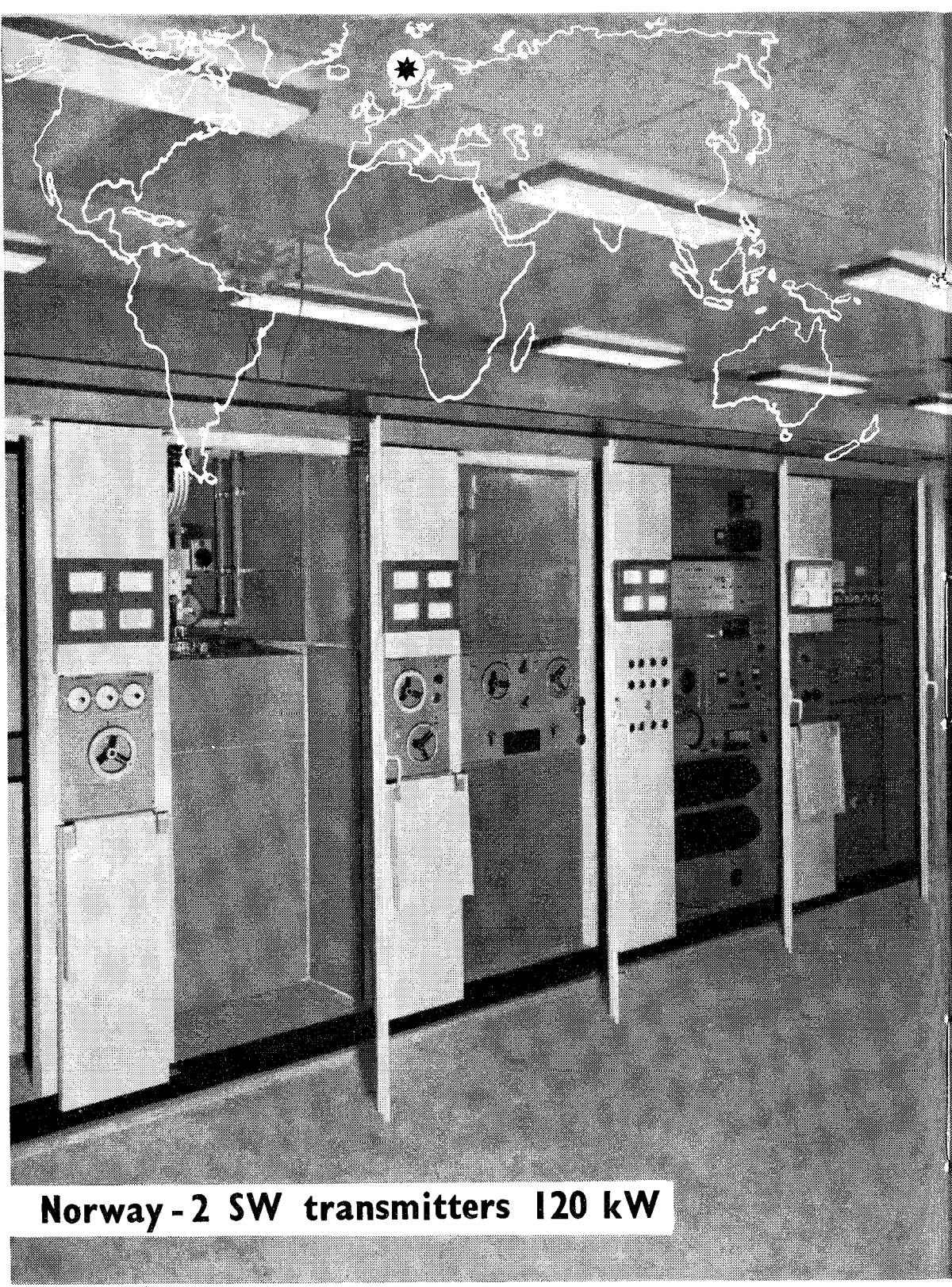
World Copyright by

WORLD RADIO-TELEVISION HANDBOOK CO. Ltd.

Editor: J. M. Frost.

Manuscript completed November 1966.

Next Edition to be published mid December 1967. Printed in Denmark by Det Berlingske Bogtrykkeri, Copenhagen, Denmark.



Norway - 2 SW transmitters 120 kW

Why station owners – all over the world – choose their equipment from the PHILIPS range

They do so for some very good reasons:

- Philips' reputation for reliability and after-sales service, maintained since the earliest days of radio (our first broadcast went on the air in 1923, our TV experiments date back to 1935).
- Philips engineers survey, plan and install the entire system, whether it consists of a simple audio amplifier or a complete TV network. And whether the site is on the equator - e.g. Quito, Ecuador - or within the polar circle - like the FM and TV station at Kiruna in Sweden.
- Philips equipment covers the complete range from microphone to broadcast transmitter, from TV camera to aerial, from line amplifier to radio link.

Studio equipment	Transmitters		Auxiliary equipment
microphones amplifiers equalizers control desks transcription turntables signalling lights tape recorders camera chains: image orthicon vidicon telecine programme mixers lighting	sound broadcasting: MW AM: 5 - 300 kW SW AM: 5 - 300 kW VHF FM: 10 W - 12 kW	TV broadcasting: Band I: 75 W - 25 kW Band III: 75 W - 10 kW Band IV and V: 2 - 20 kW	UHF radio links VHF radio links aerials feeders towers dummy aerials power supplies

PHILIPS

ELECTRO-ACOUSTICS DIVISION, EINDHOVEN.

N.V. PHILIPS' TELECOMMUNICATIE INDUSTRIE, HILVERSUM, THE NETHERLANDS

TABLE OF CONTENTS

	RADIO	TV
Aden	155	254
Afghanistan	155	
Albania	85	244
Algeria	138	252
Andorra	85	
Angola	138	
Argentina	219	271
Ascension Island	140	
Australia	178	257
Austria	85	244
Azores	86	
Bahamas	204	
Bahrain	155	
Barbados	204	269
Botswana	140	
Belgium	87	244
Bermuda	190	259
Bolivia	220	
Brazil	221	272
Brunei	155	
Bulgaria	87	244
Burma	155	
Burundi	140	
Cambodia	155	254
Cameroon	140	
Canada	190	259
Canary Islands	140	252
Cape Verde Islands	141	
C. African Rep.	141	
Ceylon	155	
Chad	141	
Chile	227	273
China P.R.	157	254
Colombia	229	273
Comores Islands	141	
Congo (Dem. Rep.)	141	252
Congo (Rep.)	142	252
Cook Islands	185	
Costa Rica	204	269
Cuba	206	269
Cyprus	159	255
Czechoslovakia	88	244
Dahomey	142	
Denmark	89	244
Dominican Rep.	206	270
Ecuador	231	273
Egypt (U.A.R.)	142	252
El Salvador	208	270
Ethiopia	143	252
Falkland Islands	235	
Faroe Islands	90	
Fiji	185	
Finland	90	244
France	92	244
Gabon	144	252
Gambia	144	
Germany Fed, Rep.	94	246
Germany Dem. Rep.	101	247
Ghana	144	252
Gilbert & Ellice Islands	185	
Gibraltar	104	247
Great Britain	104	247
Greece	107	248
Greenland	196	
Guadeloupe	208	270
Guam	185	258
Guatemala	208	270
Guiana	235	
Guiana Fr.	235	273
Guinea Rep.	144	
Guinea Port.	144	
Guinea Sp.	144	
Haiti	210	270
Hawaii	185	258
Holland	108	248
Honduras, Br.	210	
Honduras Rep.	210	270
Hong Kong	160	255
Hungary	110	248
Iceland	112	248
India	160	255
Indonesia	162	255
Iran	162	255
Iraq	163	255
Ireland	112	248
Israel	163	255
Italy	112	248
Ivory Coast	145	252
Jamaica	211	270
Japan	164	255
Jordan	167	
Kenya	145	252
Korea (P.D.Rep.)	167	
Korea	168	256
Kuwait	169	256
Laos	169	
Lebanon	169	256
Leeward Islands	211	270
Lesotho	146	
Liberia	146	252
Libya	146	
Luxembourg	114	250
Macau	169	
Madeira	146	
Malaysia	169	256
Malagasy Rep.	147	
Malawi	147	
Maldive Islands	170	
Mali	147	
Malta	114	250
Martinique	212	270
Mauritania	147	
Mauritius	147	254
Mexico	212	270
Monaco	115	250
Mongolia	170	
Morocco	147	254
Mozambique	148	
Nepal	170	
Netherlands Antilles	215	271
New Caledonia	186	258
New Hebrides	186	
New Zealand	186	258
Nicaragua	216	271
Niger	148	
Nigeria	149	254
Norfolk Islands	187	
Norway	115	116
Pakistan	170	256
Panama	217	271
Papua	187	
Paraguay	235	273
Peru	236	273
Philippines	172	257
Poland	116	250
Portugal	118	250
Puerto Rico	217	271
Reunion	150	254
Rhodesia	150	254
Rumania	120	250
Rwanda	150	
Ryukyu Islands	174	257
Sabah	175	
Sahara, Spanish	150	
Samoa (American)	188	259
Samoa (Western)	188	
Sao Tomé	151	
Sarawak	175	
Saudi Arabia	175	257
Senegal	151	254
Seychelles	151	
Sierra Leone	151	254
Singapore	176	257
Solomon Islands	188	
Somali Rep.	151	
Somali, French	152	254
South Africa	152	
Spain	122	250
St. Pierre & Miquelon	196	260
Sudan	153	254
Surinam	238	
Swan Island	218	
Swaziland	153	
Sweden	124	251
Switzerland	126	251
Syrian Arab Rep.	176	257
Tahiti	188	259
Taiwan	157	254
Tanzania	153	
Thailand	176	257
Timor	177	
Togo	154	
Tonga	188	
Trinidad	218	271
Trust Terr. of Pacific	188	
Tunisia	154	254
Turk Islands	218	
Turkey	177	257
Uganda	154	254
United Nations	202	
Upper Volta	154	254
Uruguay	239	273
U.S.A.	196	260
U.S.S.R.	130	251
Vatican State	135	
Venezuela	240	273
Vietnam (P.D.Rep.)	177	
Vietnam Rep.	178	
Virgin Islands	218	271
Windward Islands	218	
Yemen	178	
Yugoslavia	136	252
Zambia	154	254

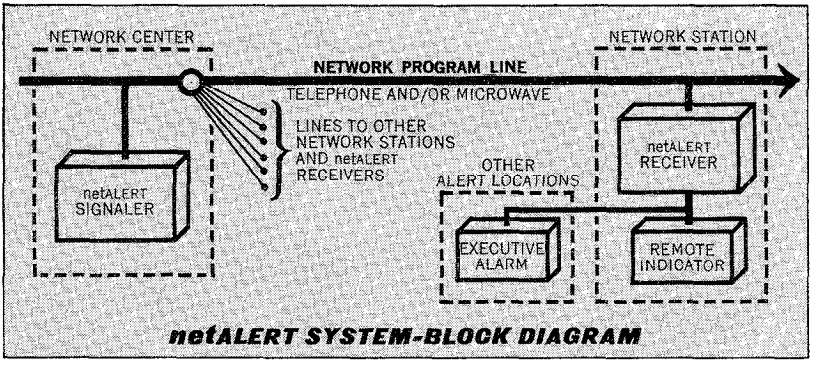
Abbreviations 68
Aerials 54, 59, 60
Broadcasts in English 80, 82
Call Sign Allocations 274, 281
Colour Television 28, 30
Co-operators & Monitors 241, 303
Directory of Advertisers 304
DX-Clubs of the World 78, 79, 82
DX-Programmes 83
Eurovision 22, 26
How to use the WRTH 12, 14
Intercontinental Television 36, 38, 44
International Broadc. Organizations 16, 18
International Waters 301
Last Minute News 301–304
Language Lessons 72
Long- & Medium-Wave Stations . 277–281
News in English 76, 83
Prefaces 2, 4
Program Distributors 275, 276
Radio Broadc. Reception Conditions 42, 44
Religious Broadc. Organizations 66, 83
Representatives (Advertising) 304
Set Count by Country 74, 304
Shortwave Radio & the Ionosphere ... 46 48, 50, 52
Short Wave Stations of the World .. 282–301
Solar Activity 1967 40
Standard Frequency & Time Signal Stations 62, 64
Table of the most Suitable Megacycle Bands 1966 60
Where to obtain the WRTH 303
World Radio 85–241
World Television 243–274
World Time in all countries 70
Worlds Charts: Europe 84, Africa 137, Asia 156, Pacific 179, Trust Territory Pacific 188, No. America 189, C. & So. America 205, Caribbean Area 219.

TABLE OF SHORTWAVE STATIONS to the Summer-Supplement 1967.

In order to make this as complete and up-to-date as possible we direct an earnest appeal to **all radio stations using shortwave** to send us regularly their transmission- and/or programme-schedules.

Complete network control at the push of a button.

netALERT PROVIDES NETWORK CENTRAL WITH INSTANT SIGNALING AND CONTROL OVER ALL NETWORK STATIONS.



***netALERT* SYSTEM-BLOCK DIAGRAM**

netALERT sends silent signals to alert your network stations without program interruption.

netALERT provides instant communication to your entire country in a national emergency.

netALERT operates remote equipment.

netALERT may be controlled only from network central.

netALERT is flexible. Your imagination is the only limitation to its uses.

netALERT is a proven system now used on the entire CBS Radio Network in the United States.

netALERT is just one of the many fine professional broadcast products available from the CBS Laboratories Division of the Columbia Broadcasting System. For more detailed information, write to the Professional Products Department, CBS Laboratories, Stamford, Connecticut, U.S.A.

CBS LABORATORIES
Stamford, Connecticut. A Division of Columbia Broadcasting System, Inc.

HOW TO USE THE WORLD RADIO TELEVISION HANDBOOK

The World Radio TV Handbook is designed to help the international radio listener obtain maximum enjoyment from his receiver.

The first section of the Handbook contains instructive articles relating to broadcasting, information regarding broadcasting and television organizations, and popular technical articles and tables of practical value to listeners.

The main section of the book (pages 85–241) contains detailed information, by country, of the **Radio Stations** and broadcasting organizations of every country in the world, including names and addresses of broadcasting companies, names and titles of leading officials, lists of broadcasting stations in each country, including frequencies, wavelengths, transmitter power, call signs (if used), and station names. Program information is also listed, including times, frequencies, and beam areas of the broadcasts in each language. The announced **location** of the st., rel. st's exc., is usually the studio and administrative location, since the tr's are often located in outlying areas. – **Power** is stated in kilowatt (kW) or Watt (W). When two powers are listed, the figures represent the lower and upper limits of power, where a station uses more than one tr. on the frequency at different times (s.w.) or varies the power of the tr. for day and night operation (m.w.).

A **listing by frequency and wavelength** of the shortwave stations of the world, and long and medium wave stations of Europe, North Africa, Near East is presented in the last part of the Handbook, for use in facilitating the identification of stations.

Abbreviations: See page 68 for explanation.

Short-wave stations may be used either for domestic broadcasting to listeners in the same country or for international broadcasting directed to listeners in other countries.

International short-wave stations usually employ directional antennas to beam their programs to particular areas on frequencies calculated for best reception. Most international broadcasts are scheduled for the evening hours in the intended reception area, but some are in the morning or at other times during the day. The reception areas give their names to the services: European Service (or to Europe), Far Eastern Service (or to Far East), North American Service (or to North America) etc. Languages employed are those of the listeners in the area to which the broadcast is directed, also the language of the transmitting country for reception by persons understanding that language.

Best reception is usually obtained from transmissions directed to your area. However, there is a considerable amount of overlapping between many service areas and, therefore, it is often possible to obtain good reception of programs beamed to adjacent areas, and sometimes, even of programs directed to distant parts of the world. Shortwave propagation conditions change continually because of the influence of daylight and darkness, seasonal effects and solar activity. Consequently, good reception requires frequency change from time to time.

(See articles: "Radio Broadcast Reception Conditions", "Solar Activity", "Shortwave Radio & the Ionosphere" on the respective pages).

Domestic short-wave stations are usually of lower power than international stations, and generally use non-directional or wide beam antennas, in order to reach local or national audiences. These stations make fewer seasonal frequency changes, and many operate on the same channel for both day and night operation. The stations are utilized to reach areas of a country where coverage by medium and long wave stations is not adequate.

Long and Medium wave stations are used mainly for transmitting programs to listeners in the country in which the stations are located. These stations vary from powerful transmitters capable of being heard throughout the country to low power stations intended only for a small area in the vicinity of the transmitter.

FM (Frequency Modulation) Stations operate on very high frequencies (VHF); ranges of 88-108 Mc in the Americas and 87-100 Mc in other areas, and provide interference-free reception over a short radius. Most FM stations relay programs of a medium or long wave station.

Frequency and Wavelength – Frequencies are measured in kilocycles per second (kc/s) and megacycles per second (Mc/s). A kilocycles is 1000 cycles. A megacycles is 1000 kilocycles. Wavelengths are measured in meters.

A formula between frequency and wavelength is as follows: Frequency (kc/s) $\times$ Wavelength (m) = 300000. Wavelength (m) $= \frac{300000}{\text{Frequency (kc/s)}}$ and Frequency (kc/s) $= \frac{300000}{\text{Wavelength (m)}}$.

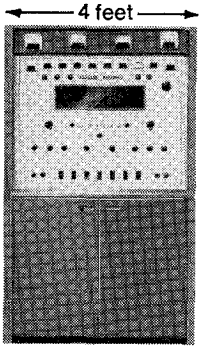
Several broadcasting stations announce frequencies in "Kilohertz (kHz)". "One Hertz" (named after the German physicist Heinrich Hertz) signifies "one cycle per second" and, accordingly, one Kilohertz (kHz) equals one Kilocycle per second (kc/s).

Due to the propagational conditions, interference by other stations, jamming, malfunction of transmitter, reallocation of frequencies by a country or convention, or for some other reason, stations may use frequencies which are at variance with the frequency(ies) indicated in this handbook.

Program times used in the listings are based on the 24 hour clock. Midnight is 00.00 hours, 3 a.m. is 03.00 hours, 9 a.m. is 09.00 hours, and midday is 12.00 hours. Then, instead of starting another 12 hour cycle (p.m.), under the 24 hour system the hours increase until midnight. Thus 3 p.m. is 15.00 hours, 10 p.m. is 22.00 hours, and so on until 23.59 (11.59 p.m.) is reached and a new 24-hour cycle starts. This system eliminates any confusion between times a.m. and p.m.

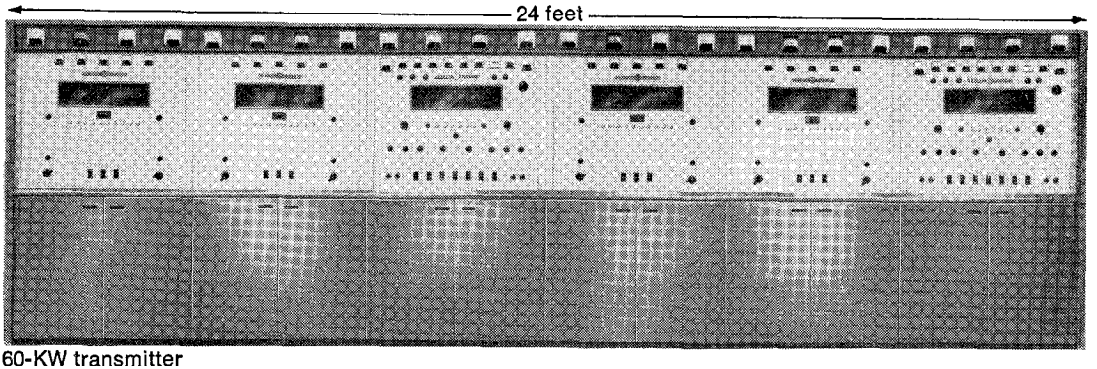
Time Conversion: All programs are listed in GMT (Greenwich Mean Time). To convert from GMT to your local time, refer to the World Time Table on page 70 to determine how many hours your time is ahead or behind GMT, and add or subtract that amount in order to convert to your clock time. For quick conversion, it is useful to write the GMT hours, 00 to 24, down on one side of a sheet of paper, and then enter the correct local time opposite each GMT hour. Summer time or Daylight Saving time, adds an hour to local time, so this should be taken into account in countries where it is utilized.

Program schedules: The program schedules of many countries are divided into Home Services and Foreign Services. The Home Service programs are arranged by language and by program services or networks. The Foreign Service transmissions are generally arranged by beam area, and by language for each beam area. The times and frequencies of the programs in each language are listed together, in order to facilitate the determination of the times and frequencies of the broadcasts in each language.



1-KW driver module

Start with this compact General Electric 1-KW transmitter.



60-KW transmitter

Add matching modules to meet your future VHF-TV needs.

The building-block design of General Electric transmitters and amplifiers lets you keep pace with your increasing power needs. Simply by adding matched modules you can increase the power of your 1-KW transmitter to 5, 10, 30 or even 60 KW.

For example, combine the 1-KW transmitter with a 10-KW visual-and-aural amplifier and a 30-KW visual amplifier to create a 30-KW transmitter. Parallel two 30-KW transmitters for the six-module, 60-KW version shown. It's only 24 feet long—substantially more compact than competitive modules.

G.E.'s full line of VHF transmitters is designed for color and monochrome operation—all with remote-control capabilities. And all are air-cooled.

For more information on these new G.E. transmitters or on any other part of General Electric's complete television package—cameras, studio equipment, antennas—contact your G.E. representative. *General Electric Company, Dept. 43-11 TVH, 159 Madison Ave., New York, N.Y. 10016, U.S.A.*

GENERAL ELECTRIC
Trademark

HOW TO USE *(continued from page 12)*

Therefore, if you wish to hear a broadcast in a particular language from a country, refer to the listing for that country of the time and frequency of broadcasts in that language. Most broadcasts are transmitted on more than one frequency, so try the various frequencies listed, to determine which one is received best at your location.

Identification of Stations: Most stations in Europe, Middle East, Africa and Asia identify by announcing their station name and location. Most stations in North America and Pacific (incl. Australia/New Zealand) identify by the use of a call sign of three to five letters or a combination of letters and figures, of which the first, or first two, denote the nationality in accordance with the international list of prefixes. Most stations in Latin America use a call sign (sometimes not frequently announced), a station name, and location.

In addition, many stations use musical interval signals at sign on and between programs, in order to help listeners to find the station on their dial and identify it as the desired station. These interval signals are included in the country listings.

How to identify a Station by Frequency or Wavelength: When you hear a station that is unknown to you, first try to determine some clue to its identity by attempting to determine the language, noting the type of program, etc. Then, note the approximate frequency or wavelength indicated on your dial, and turn to the table "Short-wave Stations of the World" in the back of the Handbook, and ascertain what stations operate in that vicinity. Next, check the program listings to determine which of the stations are scheduled to operate at that time of day, and which are most likely to be audible at your location, depending on the power and distance away. For definite confirmation, it is desirable to wait for station announcement or interval signal.

Frequency Changes: The frequencies listed are those which were scheduled for use at the time of publication. However, due to a number of reasons, including interference and changes in propagation conditions, it may be necessary for a country to make frequency changes. Often only one of the frequencies on a program will be changed, so the new frequency can be determined by tuning in the other frequencies and listening for the announcement of the frequencies being used. Reference to a publication listing the latest frequency changes for the International Stations: the **Summer-Supplement to the WRTH** (published by mid June each year) or a monthly short-wave listeners publication issued in your country, is also helpful.

Interference: Due to the present crowded condition of the medium and short wave broadcasting bands, interference may be encountered from other stations operating on the same or closely adjacent frequency. In addition to interference from other broadcast stations, there may also be interference from "jammers", which transmit a variety of noises in an attempt to prevent certain foreign broadcasts from being heard in the country operating the jammers. When interference is encountered, try another of the listed or announced frequencies, if several are in use, or try a broadcast at another time.

Reception from Hard-to-Hear Countries: If you wish to hear a station or program from a particular country, refer to the listing from that country, determining first whether it has any broadcasts beamed towards your area or adjacent areas, if not, refer to the frequency, time and power listing to determine where and when reception might be possible. Also, note the bands and times when stations in other countries in that part of the world are audible. It is possible to hear many far distant stations, even if they do not beam programs to your area, by listening when the propagation and clearness of channel conditions are favorable.

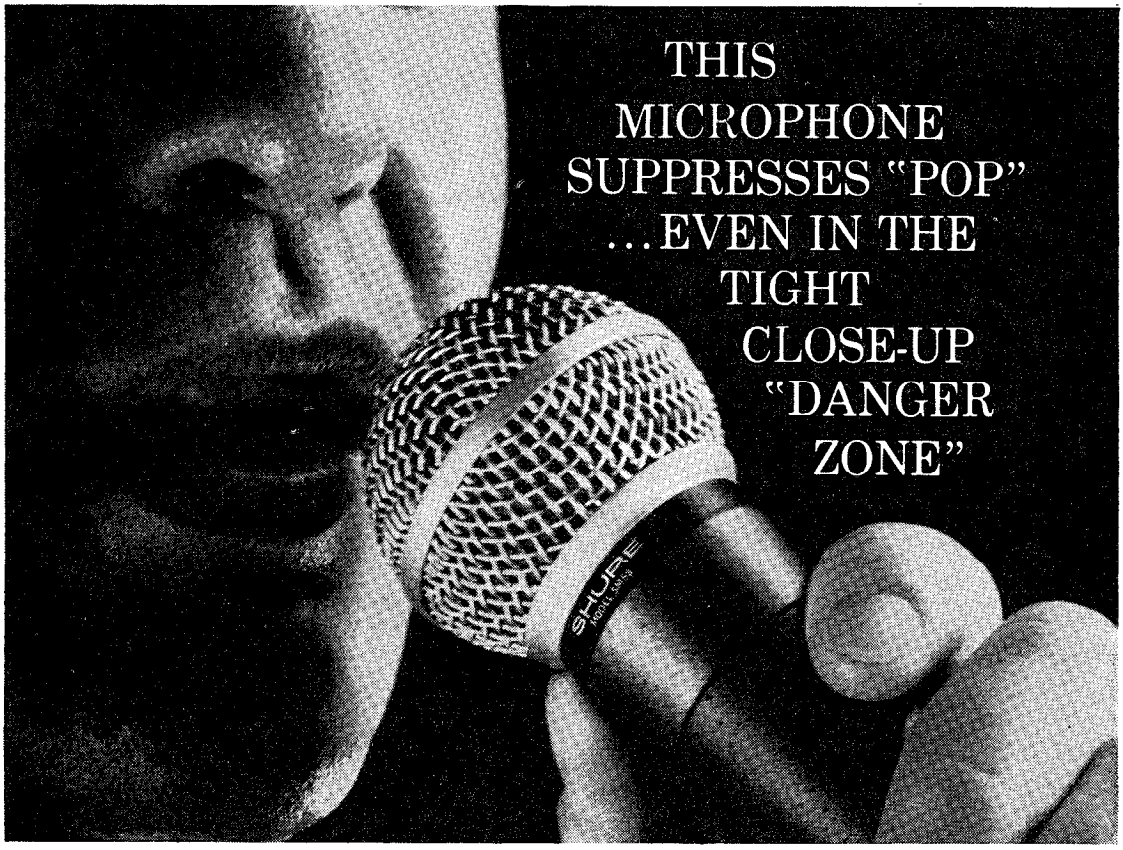
Verification by QSL-cards: As indicated in the program listings for the various countries, many stations are interested in receiving reports from listeners about their transmissions. These stations acknowledge reports by sending listeners a QSL card (verification) or letter. Most **international** broadcasting stations do not require enclosure of return postage and will reply with a QSL card or letter. **Domestic** broadcasting stations do not normally request reports from foreign listeners, so return postage should be sent with reports to these stations. Return postage should be sent in the form of an International Reply Coupon (IRC), obtainable at post offices in most countries. Reports should be sent to the station address given in the country listings. They can be written in English in most cases, but Spanish is preferred by South and Central American stations.

Reception reports are useful to radio engineers in selecting the most suitable frequencies for broadcasts beamed to your area. Reports are preferred in the SINPO code, which is as follow:

S (Signal Strength)	I (Interference)	N (Noise)	P (Propagation Disturb.	O (Overall Merit)
5 excellent	5 nil	5 nil	5 nil	5 excellent
4 good	4 slight	4 slight	4 slight	4 good
3 fair	3 moderate	3 moderate	3 moderate	3 fair
2 poor	2 severe	2 severe	2 severe	2 poor
1 barely aud.	1 extreme	1 extreme	1 extreme	1 unusable

Information about **Television Stations** is provided in the section following the radio section, including names and adresses of Television companies, location, power and channel of Television stations, and program schedules of these stations.

With reference to the first Television page we give a short explanation of some of the technical words and figures mentioned—The announced **location** of the station is usually the studio location, since most TV tr's are situated upon the highest location in the area in order to obtain more widespread coverage—Two systems of **modulation** are used to transmit the audio signal of the TV st's either frequency modulation (FM) or amplitude modulation (AM). All video transmissions are normally amplitude modulated — **Polarization** signals are horizontally polarized (H) or are vertically polarized (V). Polarization is usually selected according to the need for a reduction of interference with other stations, or to obtain engineering standards required by the government of the country in which the st. is located — The **band width** is shown in Mc and represents the limits within which both the video and audio tr. are contained — **Number of lines** transmitted express the number necessary to form one complete frame or picture, and **frames** state the number of times per second the picture area is completely scanned—**Video and Audio Power** is indicated in kilowatt (kW) or Watt (W). In the most cases the figures denote the effective radiated power (ERP) due to the stations antenna system—**Video and Audio Frequency** is stated in Mc per sec. The relationship between the quoted figures and the limits of the video band varies among countries and can be determined by reference to the standards of the systems used by the respective countries.



The Shure SM58 self-windscreened unidirectional microphone is ideal for broadcast uses as remote news, sports, interview and vocal recordings because it eliminates or minimizes the irritating "pop" caused by explosive breath sounds. It's great for studio announcing, too—or wherever the announcer or vocalist "hugs" the microphone. Of course, the same filters that eliminate pop also do away with the necessity for an add-on windscreen for outdoor uses.

On the other hand, the unusually effective unidirectional cardioid pickup pattern (uniform at *all* frequencies, in *all* planes) means that it is a real problem-solver where background noise is high or where the microphone must be operated at some distance from the performer. Incidentally, but very important, the SM58 tends to control the low frequency "boominess" that is usually accented by close-up microphones.

Other features: the complete pop-proof filter assembly is instantly replaceable in the field, without tools. Filters can be easily cleaned, too. Stand or hand operation. Detachable cable. Rubber-mounted cartridge minimizes handling noise.

Special TV tested non-glare finish. Multi-impedance, small size for maximum handability.

SHURE SM58

SELF-WINDSCREENED UNIDIRECTIONAL DYNAMIC MICROPHONE

Write for complete details and technical data, to—

SHURE BROTHERS, INC., Export Dept., 222 Hartrey Avenue, Evanston, Illinois 60204, U.S.A.

INTERNATIONAL BROADCASTING AND TELEVISION ORGANIZATIONS

EUROPEAN BROADCASTING UNION (EBU)
UNION EUROPEENNE DE RADIODIFFUSION (UER)
EUROVISION

Seat, Administrative Office, Department of Legal Affairs: 1, *rue de Varembé, Geneva*, Switzerland.
Technical Centre: 32, av. Albert Lancaster, Brussels, Belgium.
Receiving and Measuring Station: Jurbise (Belgium).
International Television Coordination Centre (*Eurovision*), *Palais de Justice, Brussels*, Belgium.
Administrative Council: President: J. B. Broeksz, NTS-NRU (Associations of Dutch Radio and Television Organizations). Vice-Presidents: Sir H. Greene, BBC (British Broadcasting Corporation), J. B. Dupont (*O.R.T.F.*).
Administrators: Representatives of broadcasting organizations in: Denmark, Finland, France, Germany (Fed. Rep.), Ireland, Italy, Netherlands, Spain, Switzerland, United Kingdom (BBC) and Yugoslavia.
Directors: Director, Administrative Office: H. Hahr. ***Director of Legal Affairs:*** G. Straschnov. **Director of Technical Centre:** G. Hansen.
Active Members: Broadcasting organizations in: Austria, Belgium, Denmark, Finland, France, German Fed. Rep. (ARD, ZDF), Greece, Iceland, Ireland, Israel, Italy, Lebanon, Luxembourg, Monaco, Netherlands, Norway, Portugal (ENR, RTP), Spain, Sweden, Switzerland, Tunisia, Turkey, United Kingdom (BBC, ITA/ITCA), Vatican State, Yugoslavia.
Associate Members: Broadcasting organizations in: Australia (ABC, Federation of Australian Commercial Television Stations), Brazil (Associação Brasileira de Emissoras de Rádio e Televisão, Diarios Associados Ltda., Emissoras Unidas de Rádio e Televisão), Canada (CBC), Ceylon, Chad, Congo (Kinshasa), Cyprus, Dahomey, Gabon, Ghana, Haiti, Ivory Coast, Japan (NHK, NAB), Kenya, Liberia, Malawi, Malta, Mexico, Morocco, New Zealand, Niger, Nigeria, Pakistan, Rep. of South Africa, Rhodesia, Tanzania, United States (ABC, BFA, CBS, NAEB, NBC, NET, Time-Life Broadcast Inc., US Information Agency), Upper Volta.
Publications: EBU Review – every month in English and French, published in two separate parts: A (Technical) and B (General and Legal) – Long and Medium wave reports (European Area) – Lists of European stations (long and medium waves, VHF sound broadcasting, and television) – General, Legal and Technical Monographs – Reports of seminars on educational television.

INTERNATIONAL RADIO AND TELEVISION ORGANIZATION OIRT

Addr: 15, U Mrázovsky, Prague 5, Czechoslovakia. **Cable:** Interadif, Praha.
Nature: International Organization dealing with practical and theoretical questions connected with broadcasting and television prgr's and technique and cooperation between broadcasting and television organizations.
Governing Body: General Assembly consisting of one representative for each active member.
Administrative Council: Consisting of 7 to 13 members, Chairman for 1966–1967: Wlodzmierz Sokorski, President of the Polish Radio and Television Committee. Vice-Chairmen for 1966–1967: representatives – Presidents or General Directors of the U.A.R. Broadcasting Corporation, Cairo and of the National Broadcasting Organization "Voice of Vietnam", Hanoi.
Members: Representatives of the Radio and Television Organizations of the Chinese People's Rep., Rep. of Cuba, Czechoslovak S. Rep., Lithuanian SSR, People's Rep. of Poland, Rumanian Socialist Rep., United Arab Rep., Union of Soviet Socialist Rep., Democratic Rep. of Vietnam.
Members: Radio and Television Organizations of: The People's Rep. of Albania; Belorussian SSR; People's Rep. of Bulgaria; Chinese People's Rep; Rep. of Cuba; Czechoslovak S. Rep; United Arab Rep; Estonian SSR; Finland; German Democratic Rep; Hungarian People's Rep; Iraq; Korean People's Democratic Rep; Latvian SSR; Lithuanian SSR; Rep. of Mali; Moldavian SSR; People's Rep. of Mongolia; People's Rep. of Poland; Rumanian Socialist Rep; Ukrainian SSR; Union of Soviet Socialist Rep; People's Democratic Rep. of Vietnam.
Facilities: Administrative Office and Technical Centre, Prague, Czechoslovakia.
Specialized Commissions: Technical Commission: Chairman: Z. Zherkov (Bulgarian People's Rep.). Radio Prgr. Commission: Chairman: R. Grimmer, First Vice-President of the Radio & Television Organization of the German Democratic Rep; Television Prgr. Commission and Intervision Council: Chairman: F. Kulcsár, Hungarian Radio and Television.
Publications: Review of the International Radio and Television Organization (OIRT) "Radio & Television" in English–French, Russian and German, issued every two months. Monthly OIRT Information, and quarterly Catalogues of prgr's suitable for exchange: a) radio, b) television.
Meetings: General Assembly every two years, Administrative Council every year.
Relations with all important organizations active in the field of radio and television.

INTERNATIONAL TELECOMMUNICATION UNION

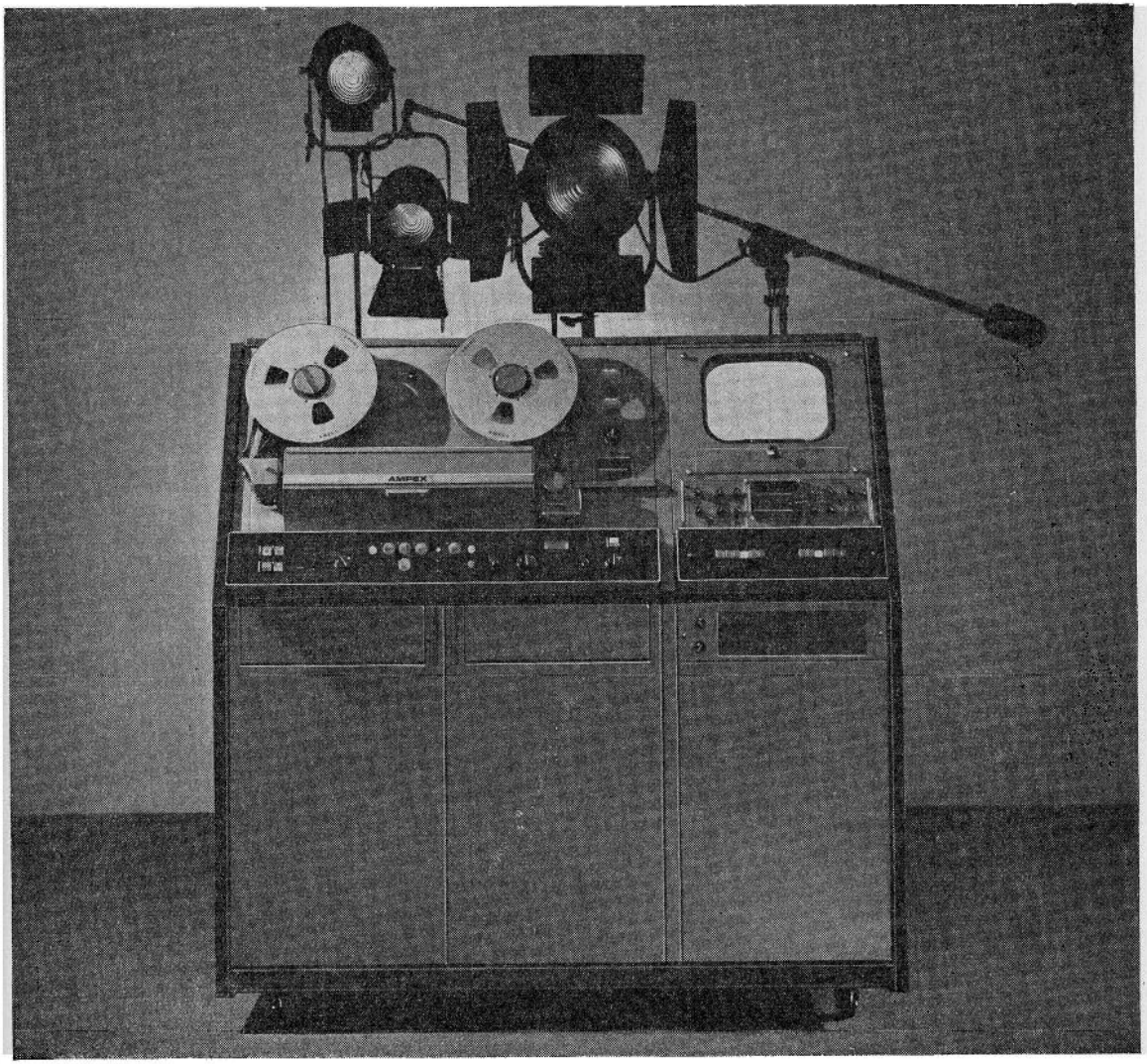
Addr: Place des Nations, 1211 Geneva 20, Switzerland. **Te:** 237000–348000.
Secretary General: Dr. Manohar Balaji Sarwate, India.
Intern. Frequency Registration Board (IFRB). *Intern. Tel. & Tel. Consultative Committee* **(CCITT).**
Dir: J. Rouvière, France.
Intern. Radio Consultative Committee (CCIR). Dir. ad interim: Leslie W. Hayes, United Kingdom. Study Group X (broadcasting). Chairman: A. P. Walker, USA; Study Group XI (television), Chairman: E. Esping, Sweden; Study Group XII (Tropical Broadc.), Chairman: N. V. Gadadhar, India.
Administrative Council: Algeria, Argentina, Australia, Brazil, Canada, China, Dahomey, Ethiopia, Federal Rep. of Germany, France, India, Ireland, Italy, Japan, Lebanon, Malagasy Rep., Mexico, Morocco, Nigeria, Pakistan, Poland, Saudi Arabia, Switzerland, Uganda, United Kingdom, United States of America, USSR, Venezuela, Yugoslavia.
Membership (129 Members): Afghanistan, Albania (People's Rep. of), Algeria (Dem. and Popular Rep. of), Saudi Arabia (Kingdom of), Argentine Rep, Australia (Commonwealth of), Austria, Belgium, Bielorussian SSR, Burma (Union of), Bolivia, Brazil, Bulgaria (People's Rep. of), Burundi (Kingdom of), Cambodia (Kingdom of), Cameroon (Federal Rep. of), Canada, Central African Rep, Ceylon, Chile, China, Cyprus (Rep. of), Vatican City State, Colombia (Rep. of), Congo (Dem. Rep. of the), Congo (Rep. of the) (Brazzaville), Korea (Rep. of), Costa Rica, Ivory Coast (Rep. of the), Cuba, Dahomey (Rep. of), Denmark, Dominican Rep, El Salvador (Rep. of), Terr's represented by the French Overseas Post & Telecomm. Agency, Ecuador, Spain, USA, Ethiopia, Finland, France, Gabon Rep, Ghana, Greece, Guatemala, Guinea (Rep. of), Haiti (Rep. of), Upper Volta (Rep. of), Honduras (Rep. of), Hungarian People's Rep, India (Rep. of), Indonesia (Rep. of), Iran, Iraq (Rep. of), Ireland, Iceland, Israel (State of), Italy, Jamaica, Japan, Jordan (Hashemite Kingdom of), Kenya, Kuwait (State of), Laos (Kingdom of), Lebanon, Liberia (Rep. of), Libya (Kingdom of), Liechtenstein (Principality of), Luxembourg, Malaysia, Malawi, Malagasy Rep, Mali (Rep. of), Malta, Morocco (Kingdom of), Mauritania (Islamic Rep. of), Mexico, Monaco, Mongolian People's Rep, Nepal, Nicaragua, Niger (Rep. of the), Nigeria (Federal Rep. of), Norway, New Zealand, Uganda, Pakistan, Panama, Paraguay, Netherlands (Kingdom of the), Peru, Philippines (Rep. of the), Poland (People's Rep. of), Portugal, Spanish Provinces in Africa, Portuguese Oversea Provinces, Syrian Arab Rep, United Arab Rep, Federal Rep. of Germany, Federal Socialist Rep. of Yugoslavia, Ukrainian SSR, Somali Rep, Rhodesia, Roumania (Socialist Rep. of), United Kingdom of Great Britain and Northern Ireland, Rwanda (Rep. of), Senegal (Rep. of the), Sierra Leone, Singapore, Sudan (Rep. of the), South Africa (Rep. of), and Territory of South-West Africa, Sweden, Switzerland (Confederation), Tanzania (United Rep. of), Chad (Rep. of the), Czechoslovak Socialist Rep, Territories of the USA, Overseas Terr. for the international relations of which the Gov. of the UK are responsible, Thailand, Togolese Rep, Trinidad and Tobago, Tunisia, Turkey, Union of Soviet Socialist Rep, Uruguay (Oriental Rep. of), Venezuela (Rep. of), Vietnam (Rep. of), Yemen, Zambia (Rep. of),

UNESCO

(United Nations Educational, Scientific and Cultural Organization).
Addr: Place de Fontenoy, Paris 7, France – **L.P:** Dir. Gen: René Maheu.
Asst. Dir. Gen. for Communication: Tor Gjesdal.
Radio and Visual Information Division: Chief: Hans R. van Stuwe. Deputy Chief: Gerald S. Wade – Regional Units: Jean Bhownagary (Asia). Anatoli Bolgarev (Russian language production). Jean Calvel (French language production). Rex Keating (English language production). Fernando Restrepo (Spanish language production). Gerald S. Wade (North America).
Mass Communication Techniques Division: Chief: Pierre Navaux. Radio and TV techniques: Henry R. Cassirer.

UNION OF NATIONAL RADIO AND TELEVISION ORGANISATIONS OF AFRICA (URTNA)

URTNA is a Union of National Broadcasting Organizations of all independent Africa, its aims, under article 2 of its statutes are: –



The video recorder that sets a new standard: The Ampex VR-2000

Ampex's Videotape* Television Recorder, VR-2000 is expressly designed to operate on new high band standards. It utilizes a new high band carrier/deviation frequency (7.16 to 9.3 mc), which permits a single standard for both colour and monochrome. The VR-2000's performance specifications are impressive: a S/N ratio up to 46 db; basic frequency response to six megacycles; excellent transient response and virtually non-existent moire. Performance is so good, in fact, that multiple generation copies made on the VR-2000 equal original tapes made on present equipment.

Although it possesses all this upper range ability, the VR-2000 is instantly switchable to present low band standards in either 625 or 525 lines. And for all its sophistication, it is the most reliable and easy to operate recorder ever built. A complete line of VTR accessories is available now for the VR-2000: Intersync* (standard on all VR-2000s); Amtec;* Electronic Editor; Colortec;* and Editec.* The VR-2000 and its accessories are products, not promises. The VR-2000 is presently in most of the world's television networks. Write today for complete information.

AMPEX

Ampex sales and service facilities are conveniently located throughout Europe and the Middle East. For more information write to: Ampex Great Britain Ltd., Acre Road, Reading, Berkshire, England. Telephone Reading 84411 · Ampex S.A., Via Berna 2 Lugano, Switzerland. Telephone 091/3.81.12 · Ampex Europa, G.m.b.H., 6 Frankfurt Main, Dusseldorfer Strasse 24, Germany. Telephone 252001 – 5. Ampex, 41 Avenue Bosquet, Paris 7e, France. Telephone 705.38.10.

"The U.R.T.N.A. has no commercial aims. Its objects are: –

(a) To support in every field the interests of those African organisations operating radio and or television services that have accepted the present statutes and to establish relations with other international organisations.
(b) to promote and coordinate the study of all questions relating to broadcasting and to secure the exchange of information on all matters of general interest to those radio and or television services.
(c) to take all possible steps designed to assist the development of African radio and television in all its forms.
To seek within the framework of African co-operation, the solution to any differences that may arise between members.
(e) to use its good offices to ensure respect by all members for the provision of international and inter-African agreements relating to all aspects of radio and television".

The Union headquarters is at the moment in Dakar and its Technical Centre at Bamako – The Pres. of the Union is Mr. M. Rezzoug, Algeria; Vice-Pres. Mr. Racine Kane, Mali. The Director of the Administrative Centre at the Headquarters is Mr. A. H. Younes. The Director of the Technical Centre is A. H. Antar. Members of the Administrative Council of the Union are Algeria, Cameroon, Congo-Brazzaville, Ivory Coast, Mali, Mauritania, Nigeria, Senegal and Togo. – The Headquarters address of the Union is U.R.T.N.A., 15, Boulevard de la Republique, B.P. 3237, Dakar, Senegal.

ASIAN BROADCASTING UNION

Headquarters: ABU Secretariat, c/o NHK, Uchisaiwai-cho, Chiyoda-ku, Tokyo, Japan. Cable address: ABUNI, Tokyo.
Sec. Gen.'s Office: Box 3636, G.P.O., Sydney, Australia. Cable address: ASBUN, Sydney.
President: Yoshinori Maeda, President, Nippon Hoso Kyokai, Japan.
Administrative Council: Australian Broadcasting Commission, Broadcasting Corporation of China, All India Radio, Nippon Hoso Kyokai, Radio and TV Malaysia, New Zealand Broadcasting Corporation, Philippine Broadcasting Service, Radio Thailand, Turkish Radio and TV Corporation.
Secretary-General: Sir Charles Moses, C.B.E.
Full Members: Radio Afghanistan, Australian Broadcasting Commission, Radio Ceylon, Broadcasting Corporation of China, All India Radio, Nippon Hoso Kyokai, Korean Broadcasting System, Radiodiffusion Nationale Lao, Radio and TV Malaysia, Radio Nepal, New Zealand Broadcasting Corporation, Radio Pakistan, Philippine Broadcasting Service, Radio and TV Singapore, Radio Thailand, Tonga Broadcasting Commission, Turkish Radio and TV Corporation, UAR Broadcasting Corporation, Radio Viet-Nam, Samoa Broadcasting Service.
Associate Members: Federation of Australian Commercial Broadcasters, Brunei Broadcasting Service, Canadian Broadcasting Corporation, Fiji Broadcasting Commission, Office de Radiodiffusion Television Française, Arbeitsgemeinschaft der Öffentlich-Rechtlichen Rundfunkanstalten der Bundesrepublik Deutschland, Zweites Deutsches Fernsehen, Radio Hong Kong, Hong Kong Commercial Broadcasting Co. Ltd., Nigerian Broadcasting Corporation, British Broadcasting Corporation, Independent Television Authority/Independent Television Companies Association Ltd. (U.K.), Columbia Broadcasting System (U.S.A.), National Broadcasting Company (U.S.A.), National Educational Television (U.S.A.), U.S. Information Agency, U.S.A., Time-Life Broadcast Inc. (U.S.A.).

The ABU is a Union of national broadcasting organisations in the Asian/Pacific region which was formally established on 1st July, 1964, following five Asian Broadcasters' Conferences held between 1957 and 1963 in Tokyo, Kuala Lumpur and Seoul. The first annual General Assembly of the ABU was held in Sydney in November, 1964, and the second, attended by delegations from 25 members, in Tokyo in October, 1965. The third Assembly in Taipei 24–31 October 1966.
Publications: ABU Newsletter (Monthly in English).

INTERNATIONAL BROADCASTERS SOCIETY (IBS)

Secretariat: 78 Zwaluwlaan, Bussum, the Netherlands. (Tel: 02159-10005).
Office for USA: 380 Lexington Avenue, Suite 303, New York City, N.Y., USA 10017. Telephone: 212 – MU 2-4500).
Nature: The IBS is a world body. It is a non-profit professional fellowship created to serve the needs of all persons and organizations everywhere concerned in any way with radio and television broadcasting.
The IBS function as a permanent forum for maintaining liaison. It interprets the meaning of the word liaison in the broadest possible manner.
There are three main types of membership. (i) Corporate, (ii) Personal and (iii) Free Exchange. **Corporate** membership is open to every radio and television station in the world as well as related industries. **Personal** membership is open to anyone in anyway concerned with radio and/or television broadcasting. **Free Exchange Membership** is offered to every association and federation in the world, in any way concerned with serving broadcasting interests.
Governing Body: The IBS is governed by a Board of Directors elected by the membership. There are sixteen seats on the Board. Names of the current Board will be found in the 1966 WRTH.
Relations: The Society has registered members from more than a hundred nations, including an exchange of memberships with a number of national and international associations.
Status: The Society is registered with l'Union des Associations Internationales, in Brussels, as a non-governmental and non-legislative organization. The Society is a legal corporate body under the laws of the Netherlands.

COMMONWEALTH BROADCASTING CONFERENCE

Members: All India Radio, Australian Broadcasting Commission, British Broadcasting Corporation, Canadian Broadcasting Corporation, Cyprus Broadcasting Corporation, Ghana Broadcasting Corporation, Jamaica Broadcasting Corporation, Malawi Broadcasting Corporation, Malta Broadcasting Authority, New Zealand Broadcasting Corporation, Nigerian Broadcasting Corporation, Radio Ceylon, Radio Pakistan, Radio Tanzania, Radio and Television Malaysia, Radio Uganda, Sierra Leone Broadcasting Service, Voice of Kenya, Zambia Broadcasting Services.
The Conference is a standing association of the national public service broadcasting organizations which are responsible for the planning and presentation of the broadcast programmes of independent Commonwealth countries. The first meeting was called in London in 1945 in order that the national broadcasting organizations of Britain, Canada, Australia, New Zealand, South Africa and India could review the co-operation which had existed between them during the war years and consider how this co-operation could best be sustained in time of peace. Subsequent Conferences, attended by the chief executives and senior engineers of the member organizations, have been held in Britain (1952), Australia (1956), India (1960), Canada (1963) and Nigeria (1965). The Seventh Conference will meet in New Zealand in February 1968.

Holding in common the belief that broadcasting is a public trust, the member organizations are professionally committed to the establishment and extension of national radio and television services as a means of information, education and entertainment. Meeting now at intervals of not less than two and not more than three years, the Conference directly promotes the pooling and sharing of experience and resources throughout the Commonwealth, and in 1965 established a permanent Study Group on Training to intensify co-operation in that particular field.
Secretariat address: Broadcasting House, London W. 1., England.

ASOCIACION INTERAMERICANA DE RADIODIFFUSION (AIR)

President: Sr. Lic. Félix Cardona Moreno, Apartado 3955, Caracas, Venezuela.
AIR is an association of the broadcasting corporations of the American countries. Founded in 1946 it represents more than 5000 broadcasting and 400 television stations.

UNIVERSITE RADIOPHONIQUE ET TELEVISUELLE INTERNATIONALE (U.R.I.)

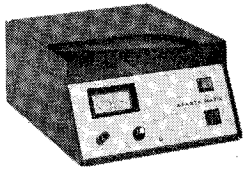
Addr: 116, Ave du President Kennedy, Paris 16è, France. Pres: M. R. Dovaz. Secr. Gen: A. Lanoux. – Radio Commission: K. Edo, Ivory Coast; E. Gampe, Germany. Mme. N. Erceg, Yugoslavia – TV Commission: H. Maas, Netherlands; L. Ehrenborg, Sweden; A. Zorzi, Italy.

ATTENTION ALL **RADIO STATIONS**

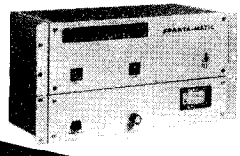
To keep the WRTH and its Supplement completely up-to-date we appeal to you to send us your schedules regularly. In turn we promise to keep your world-wide listeners informed about changes of times and frequencies.

WORLD RADIO TV HANDBOOK CO, Ltd,
Sundvej 6, Hellerup, Denmark.

SPARTA-MATIC®
TAPE CARTRIDGE SYSTEMS*

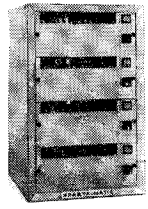


800C SERIES
Space saving, compact, table-top convenience • Transistorized modular electronics • Super-silent operation • Hinged lid for easy internal access • 800C-RP - $650 800C-P - $475



300C SERIES
Rack, table-top or cabinet mounting • Transistorized plug-in modules • 2nd and 3rd tone cue option • Separate record amplifier • Full remote operation • 300C-P - $520 300C-R - $240

MC-104
MULTI-CARTRIDGE PLAYBACK
Provides four independent plug-in CH-5 tape cartridge transports • Compact design for table-top (illustrated) or rack mount installation • Individual transistorized electronics • Manual or sequential operation • Multi tone and audio switcher options

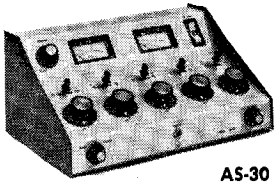


CD-15 TIME DELAY & REVERB UNIT
Time delay of 3 seconds to 31 minutes • Provides "before-air" censorship of conversational programing • Selective reverberation effects.
Price: $425

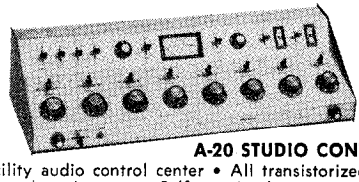
* ALL SPARTAMATIC SYSTEMS EXCEED NAB STANDARDS

† ALL SPARTA CONSOLES EXCEED FCC PROOF OF PERFORMANCE SPECIFICATIONS

SPARTA
AUDIO EQUIPMENT AND ACCESSORIES†

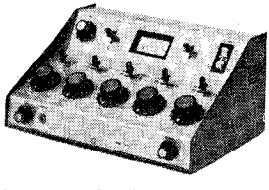


AS-30
STEREO AUDIO CONSOLE
Five stereo mixer channels • 14 stereo audio inputs • Monitor, cueing & muting terminal facilities provided • All transistorized modular electronics • Selectable stereo/mono mode control • Price: $595



A-20 STUDIO CONTROL CONSOLE
Full facility audio control center • All transistorized • Eight mixers • Twenty-two inputs • Self-contained power supply • 5 watt monitor and .5 watt cue amplifier • Accomodates eight preamps (three supplied) • Individual electronic modules • Studio talkback provisions • Functional, space-saving compactness • All inputs and output are transformer balanced • Price: $995 •

RA-5 REMOTE MIXER
Two mixers • 3 audio inputs • Line test oscillator • P.A. output • 30 hour battery operation • Shoulder strap carrying case included • Price $225 Optional A/C Power Supply (PS-3) - $29.50



A-15 AUDIO CONSOLE
14 audio inputs • Five mixing channels • Built in monitor, cueing & muting systems • All transistorized modular electronics • Three line outputs plus P.A., headphone & external speaker output • Accomodates up to four preamps • Price: $425.

AC-155
STUDIO/REMOTE UNIT
Recording studio • Remote broadcast • Main studio control • Full broadcast facility • Monitor & cue system • Muting • P. A. output • Solid state removeable console • Two 3-speed custom turntable systems • Six low-level and eight high-level inputs • Price: $995 — Model ASC-305 Stereo - $1,450

Write Dept. WRT for complete information

Exclusive Export Distributors

BROADCASTING DIVISION
Singer Products COMPANY INC

All prices subject to change

95 Broad Street, New York, N.Y. 10004 CABLE: EXREGNIS

TELESCO INTERNATIONAL CORPORATION

for broadcast equipment

CCA ELECTRONICS CORPORATION
AM and FM broadcast transmitters, antenna couplers, modulation and frequency monitors, AGC and limiting amplifiers, remote control for transmitters.

FAIRCHILD RECORDING EQUIPMENT CORPORATION
Monaural and stereo disk cutting systems including lathes, cutting heads, amplifiers; limiter, compressor, and power amplifiers; modular solid state amplifiers, preamplifiers, limiters, compressors, attenuators; integrated solid state speech input consoles; transcription turntables; reverberation generators, master tape improvement systems.

SARKES TARZIAN INCORPORATED
Television studio and transmitting equipment including live and film camera chains optical multiplexers, slide projectors, sync generators, video switching systems including vertical interval type, studio automation systems, VHF - TV transmitters, microwave links and other items.

PACKARD-BELL
Vidicon cameras for TV studio and industrial closed circuit TV applications, educational TV systems.

BALL BROTHERS RESEARCH CORPORATION
TV special effects generators, automatic gain control video amplifiers, video and pulse distribution amplifiers.

DMG ELECTRONICS INCORPORATED
VHF - TV transmitters 75 watts to 2 KW, TV sideband analyzer, multi-burst and stairstep generator, TV rebroadcast receiver.

JOHNSON ELECTRONICS INC.
Transistorized FM multiplex receivers for music systems and other applications, audio amplifiers.

CAPPS AND COMPANY INCORPORATED
Recording styli including heated types, condenser microphones.

CROWN INTERNATIONAL
Professional reel type magnetic tape recorders and reproducers, tape duplicator systems.

ELECTRO-VOICE INCORPORATED
Broadcast and general purpose microphones, speakers and speaker systems.

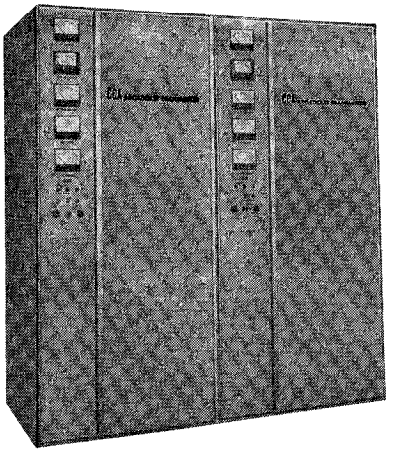
DISAN ENGINEERING CORPORATION
Portable and mobile VHF - FM program quality remote pickup links, UHF - FM multi-channel program quality STL with optional facilities for remote control and remote logging, FM background music receivers including multiplex types.

ANTENNA PRODUCTS CO.
High frequency log periodic transmitting antennas of all types including fixed station and transportable, also rotatable types; conical monopole broadband vertical omni-directional antennas, antenna support towers.

TELESCO ALSO SUPPLIES
All necessary additional items such as: TV and FM antennas, transmission line, TV translators, etc.

TELESCO serves as world-wide sales representatives for leading manufacturers of radio and television broadcasting equipment. For technical and descriptive information concerning any of the products listed, contact TELESCO

the TELESCO
INTERNATIONAL CORPORATION
171 MADISON AVENUE
NEW YORK 16, N. Y., U. S. A.
CABLE ADDRESS: TELESCOMM



AM - 10,000 D

The CCA AM-10,000D, 10 KW AM broadcast transmitter incorporates features that are standard in all CCA AM transmitters. These include:

Silicon rectifiers with minimum of 200% safety factor; 300% reserve in air cooling; minimum tube costs; low distortion high level plate modulation; automatic overload recycling; minimum floor space; full accessibility with hinged meter panels.

CCA *Quality* AM BROADCAST TRANSMITTERS

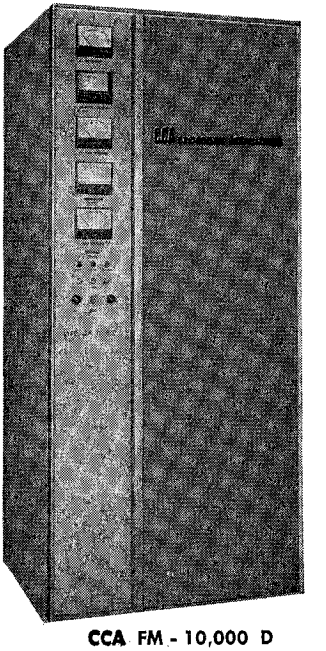
- VLF, MF. HF FREQUENCIES
- EXCEEDS FCC & CCIR SPECS
- ALL POWERS 100 TO 100,000 WATTS
- CONVENTIONAL HIGH LEVEL MODULATION
- CONSERVATIVE — LONG LIFE MODERN TUBES
- EMPHASIS ON STANDARD PARTS
- SILICON RECTIFIERS
- FULL ACCESSIBILITY
- SINGLE CHANNEL
- MULTIPLE CHANNEL PRESET
- MULTIPLE CHANNEL SIMULTANEOUS

CCA *Reliable* VHF FM BROADCAST TRANSMITTERS

- 10 TO 40,000 WATTS
- NO REQUIREMENTS FOR NEUTRALIZATION
- TRUE GROUNDED GRID PA CIRCUITRY
- DESIGNED FOR STEREO AND MULTIPLEXING
- SILICON RECTIFIERS
- MINIMUM TUBE COSTS
- AUTOMATIC OVERLOAD RECYCLING

The CCA FM-10,000D, 10KW FM broadcast transmitter incorporates engineering features which are standard in all CCA FM broadcast transmitters. These include:

Zero bias high mu triodes with grids connected directly to DC ground. This eliminates the requirement for neutralization, RF bypass capacitors and bias supplies. In addition, all transmitters contain silicon rectifiers with minimum of 200% safety factor, 300% reserve in air cooling; minimum tube cost, automatic overload recycling, multiplex and stereo operation.



CCA FM - 10,000 D
10 KW FM

CCA ELECTRONICS CORPORATION

INTERNATIONAL SALES
TELESCO INTERNATIONAL
171 MADISON AVE. — NEW YORK, N. Y.

EUROVISION IN 1966

By J. Treeby Dickinson, Chief Engineer, Technical Centre of the E.B.U.

Every year since its founding in 1954 has been marked for Eurovision by a significant development in one field or another – new countries connected to the network, a remarkable increase in the scale of the transmissions or the coverage of one or more major events. 1966 was certainly no exception; it was noteworthy in all three fields, but in particular by virtue of the coverage of the World Football Championships in the United Kingdom and of the extension of the network to Tunisia, both in July, 1966.

Extension of the Eurovision Network to Tunisia

A television transmitter had been in experimental operation at Bou-Kornine in Tunisia for some years, but it was only on May 31st, 1966 that the Radiodiffusion-Télévision Tunisienne officially inaugurated its television service. In July, 1966 the R.T.T. was connected to the rest of the Eurovision Network by means of a permanent vision link established between Sicily and Tunisia, which thus became the third country in Africa to be so connected. This was not, however, the first vision circuit to be established over this route, since a temporary link had been set up in January, 1966 from Tunisia to Sicily, with an intermediate relay on the Italian island of Pantelleria, in order to permit the R.T.T., in collaboration with the O.R.T.F., to transmit on January 22nd, 1966 a live programme from Kairuan, the second holy city of Islam, showing the celebrations that marked the end of Ramadan, the month of fasting. This programme was distributed over the Eurovision Network to some eight television services in Europe, which either broadcast it live or recorded it for transmission later in the day. A second programme was transmitted over the same route on the following day. The Radiotelevisione Italiana set up these temporary links and also assisted with the planning of the permanent link, which covers the distance of about 170 km between Monte Erice in Sicily and Cap Bon in Tunisia in a single hop. The permanent circuit will have a vision channel in each direction and the first stage of its construction, consisting of the south-going channel, was completed in early July in time to enable the R.T.T. to receive transmissions of the World Football Championships from the United Kingdom.

The World Football Championships

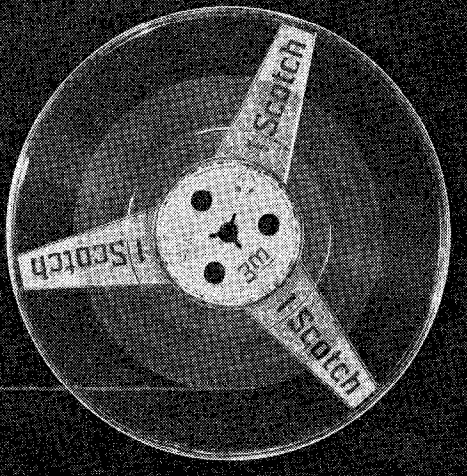
The series of transmissions from the United Kingdom during the period July 11th–30th, 1966 constituted the most important Eurovision operation of the year and indeed one of the biggest in its history. There were in all some thirty-one Eurovision transmissions of matches from eight grounds, many of them played simultaneously and totalling sixty-one hours, as well as a further eighty-eight request transmissions for individual Services, totalling thirty-five hours.

The programme requirements of E.B.U. Members were coordinated by the E.B.U. Administrative Office in conjunction with a Consortium which was formed by the B.B.C. and the commercial television services in the United Kingdom, to provide the necessary programme and technical facilities as a combined operation. The technical arrangements for transmission in Europe were coordinated by the E.B.U. Technical Centre and in certain respects they were more extensive in scale and complexity than on any previous occasion. For example, the transmissions of the opening match, the two semi-finals and the final were each received by over thirty television services in Europe, North Africa and America and in the case of the final some twenty-eight separate commentary circuits were set up. On three occasions, four matches were transmitted simultaneously, many services receiving two or more, of which one was broadcast live and the others recorded for broadcast later. Thus on July 23rd, the four quarter-final matches were received by twenty-three, thirteen, nine and eight services respectively, making a total of fifty-three service-receptions; for the commentaries, some thirty-seven circuits were set up, The simultaneous transmission of four matches necessitated the installation of a number of temporary vision links in order to provide for their distribution in continental Europe. These included two additional circuits from London across the English Channel to Lille, making a total of four working circuits and one reserve circuit available over that route. Other temporary supplementary circuits were set up between Hamburg and Copenhagen, Sand (Western Germany) and Albis (Switzerland), Monte Generoso (Switzerland) and Milano, and between Carcassonne and Perpignan in France, in order to overcome bottle-necks which would have otherwise prevented the satisfactory distribution of the programmes in Europe. In addition, a temporary circuit was set up between Lille and Brussels, so that the E.B.U.'s International Technical Coordination Centre (CICT) in Brussels could simultaneously monitor all four programmes being received from the United Kingdom. The planning of the routes to be followed by the vision and sound components of the different programme transmissions was extremely complex and, in the case of the four quarter-finals and the subsequent matches, it could not be completed in detail until it was known which teams would be playing – depending, of course, on the results of earlier matches – and consequently which matches were of particular interest to each country. In assessing the magnitude of this task, it should be borne in mind that the Championship was not the only event of international significance taking place at that time. For example, the first four days of the period coincided with the closing stages of one of the principal cycle races of the year, the Tour de France, which gave rise to numerous Eurovision transmissions. There was, moreover, a series of transmissions from the U.S.A. via the Early Bird satellite, covering the launching, flight and recovery of the space-craft Gemini X. These transmissions were required by many European television services and had to be fitted in to the already complex pattern at relatively short notice.

The successful accomplishment of this task reflects not only the close cooperation between the U.K. Consortium, the British Post Office and the E.B.U. Administrative Office and Technical Centre during the period of the Championship, but also the very comprehensive and flexible basic planning which had been effected by these bodies long in advance.

(Continued page 26)

PROBLEM: SLOW THREADING



SOLUTION: THIS NEW 3M SELF-THREADING TAPE REEL

Simply lay tape inside reel and start recorder. Reel threads itself automatically. No hooks, no slots, no hand winding. Solid sides protect tape against damage. "Scotch" Brand 7" Self-Threading Reel has a snap-tight plastic cover for dust-proof storing without a box.

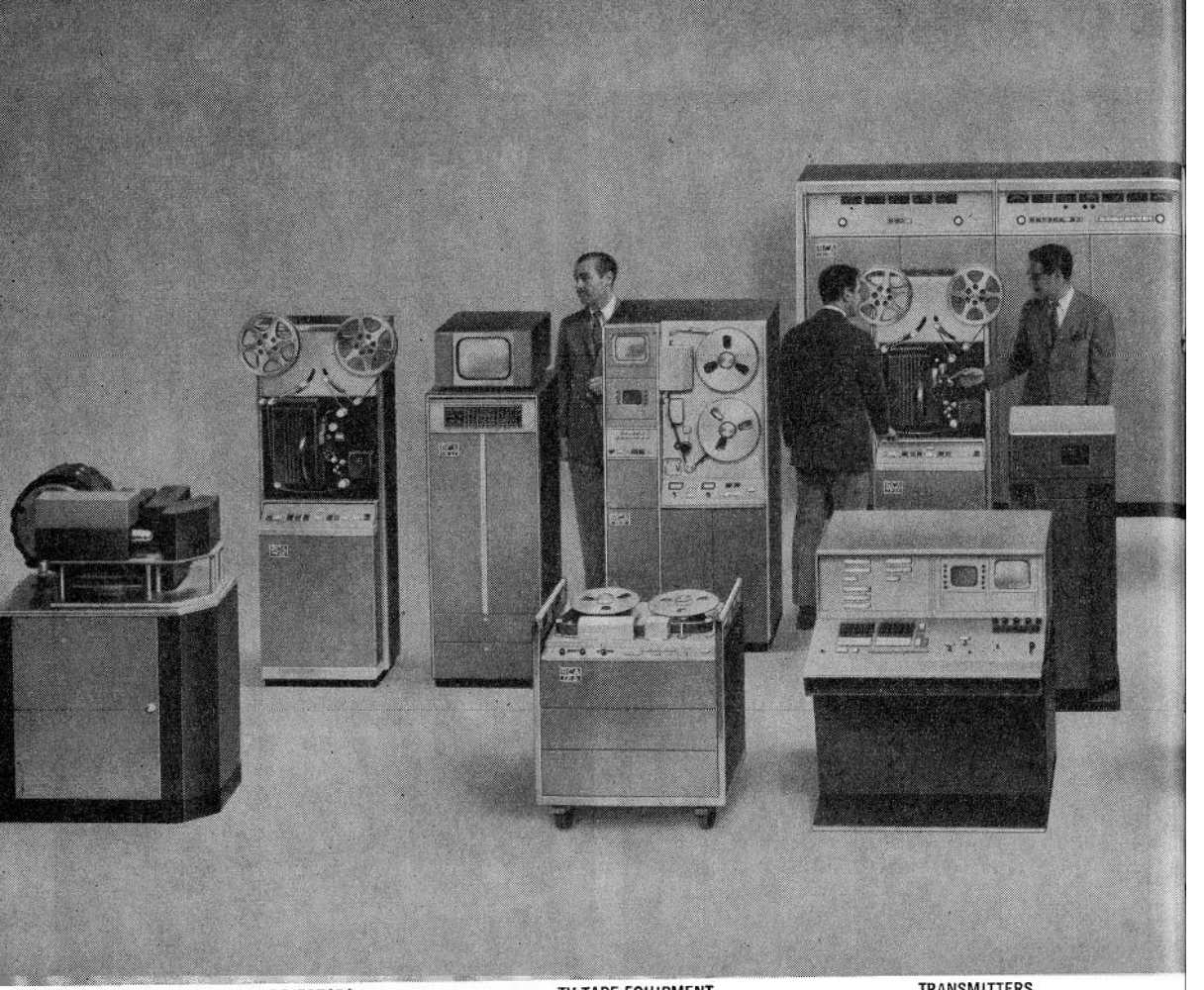
PROBLEM: TOO MUCH NOISE

SOLUTION: NEW 3M DYNARANGE RECORDING TAPES

New "Scotch" Brand Tapes (in both acetate and polyester) increase signal-to-noise ratio 3db to 6db over conventional tapes. Improve high frequency response. Wear 15 times longer. Save tape because they operate at half your normal recording speed with no loss in fidelity.

Scotch BRAND TAPES AND REELS are among scores of new 3M audio-video advances. More information? Write: 3M, Minnesota Mining & Manufacturing Co., International Division, Box 3800, St. Paul 1, Minnesota, U.S.A.

3M International Division
MINNESOTA MINING & MANUFACTURING CO.



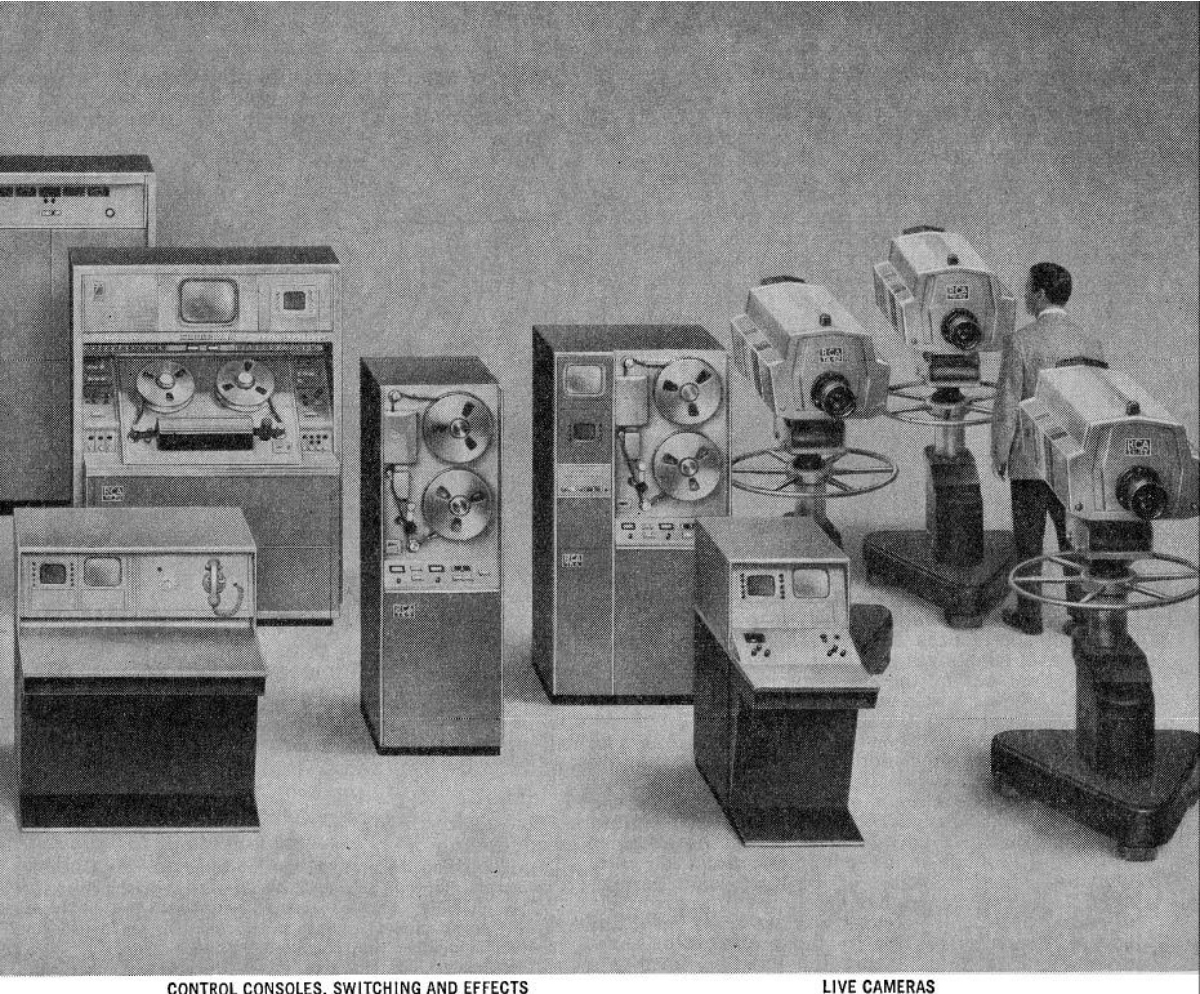
FILM CAMERAS AND PROJECTORS TV TAPE EQUIPMENT TRANSMITTERS

RCA...the

The "Matched Line" is the end result of a multi-million-dollar engineering program to produce a new generation of broadcast equipment. RCA Matched Equipment reflects the newest in styling, performance and operation—to produce definite advantages and superiority for you.

Matching means equipments that are designed to provide the ultimate in performance when used together...equipments that are designed and styled to fit together efficiently, and to provide the finest, most modern appearance for the whole station. It means installations that are compact, yet easily expandable, that offer greater reliability, and that provide for easy operation and maintenance. It means simplicity in ordering, easier follow-up and guaranteed satisfaction...from one factory, one ultimate source of responsibility, one set of designers and engineers. And it means equipment that is designed for tomorrow, assuring a better

"MATCHING" MEANS A BETTER INVESTMENT



CONTROL CONSOLES, SWITCHING AND EFFECTS

LIVE CAMERAS

matched line

investment for you through outstanding performance and equipment longevity.
If owning equipment that performs and looks better together, and lasts longer, appeals to you, why not consider RCA's Matched Line? From "big tube" cameras, advanced quadruplex recorders, film and slide projectors...to transistorized switching, controls, transmitters and antennas, the RCA Matched Line is a good thing, all the way, for you.

Contact your local RCA distributor or the nearest RCA Field Sales Office for further information, or write to: RCA INTERNATIONAL DIVISION, Dept. 200, Central & Terminal Avenues, Clark, New Jersey, U.S.A. 07066.

RCA Field Sales Offices:

EUROPE, MIDDLE EAST, AFRICA, RCA International Marketing S.A., 118 Rue du Rhone, Geneva, Switzerland

MEXICO, CENTRAL AMERICA, CARIBBEAN, RCA Victor Mexicana, S.A. de C.V., Avenida Cuitlahuac 2519, Mexico, D.F.

SOUTH AMERICA, RCA International Ltd., Calle Paroissien 3960, Buenos Aires, Argentina

FAR EAST, OCEANIA, Office of the Far East Representative, RCA International Division, 415 Prince's Building, Chater Road, Hong Kong.

THE MOST TRUSTED NAME IN TELEVISION

Trademark(s) Registered · Marca(s) Registrada(s)

EUROVISION *(continued from page 22)*

Growth in the number of transmissions

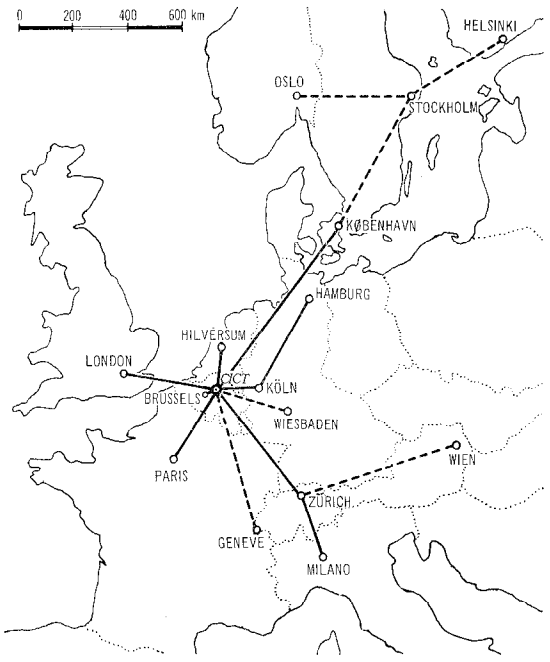
After more than ten years of Eurovision programme exchanges, it might be expected that the rate of growth of activity would slacken off and that ultimately a saturation point would be reached. However, the statistics show that this point is not yet in sight. Thus, in 1965, the number of transmissions planned and supervised by the E.B.U. Technical Centre totalled 1551 and their total duration at the origin was 969 hours, these figures representing increases of about 20% and 8% respectively compared with the corresponding figures for the previous year. The figure of 935 transmissions having a total duration of 585 hours during the first six months of 1966 – statistics for the whole year are not yet available – suggests that the growth for the whole of the year may well attain or even exceed 20% in both respects. Of course, none of the television services that participate in Eurovision takes all the transmissions, the average figure for all the exchanges is between five and six services per transmission, although programmes in certain categories are taken by many more services. One such category is that of the daily multiple-origin news exchanges in which the average participation rose from under twelve in 1965 to over thirteen in the first six months of 1966. The rapid growth of these news exchanges has been one of the most important features of the development of Eurovision in recent years and now they represent about half the total number of transmissions.

Evidently, these news exchanges can only be planned at very short notice, depending as they do on the events that can be covered by the various services and the interest expressed in them by the other services; it is in facilitating such last-minute planning that the permanently leased network of programme-sound and communication circuits, which constitutes Stage 1 of the Eurovision Permanent Network Scheme, has continued to prove itself of great value. This network was extended yet again at the beginning of 1966 by the provision of communication circuits linking the existing terminals at Zürich and Stockholm with Vienna and with Oslo and Helsinki respectively. Stage 2 of the Permanent Network Scheme, corresponding to the permanent leasing of a network of vision circuits, has been held in abeyance as the cost would be uneconomic; it is hoped that these costs will be lower if and when a telecommunication satellite can be used for this purpose.

In the field of transmissions by satellite, it should be mentioned that, following the outcome of negotiations between the E.B.U. and the authorities responsible for the operation of the Earth-stations and the Early Bird satellite, transmissions by satellite between E.B.U. Members in Europe and North America are now integrated into the routine of Eurovision operations and will certainly lead to more effective and fruitful cooperation between the television services of the two continents.

Sound broadcasting

The increase in the utilisation of the permanently leased programme circuits for transmissions between Members' sound-broadcasting services led to a decision to provide a separate area within the CICT to facilitate the supervision of such exchanges. These transmissions are mostly of the nature of news or actuality, but the Members would like to utilise the Network for exchanging programmes of serious music; preliminary trials have confirmed that the quality obtainable at present is not good enough for this purpose, especially if the music is to be subsequently broadcast over frequency-modulation networks.



Map illustrating the present state of Stage 1 of the Eurovision Permanent Network Scheme.

The full line indicates routes over which two broadcast-quality sound circuits, one in each direction, are permanently available, together with control telephone circuits.

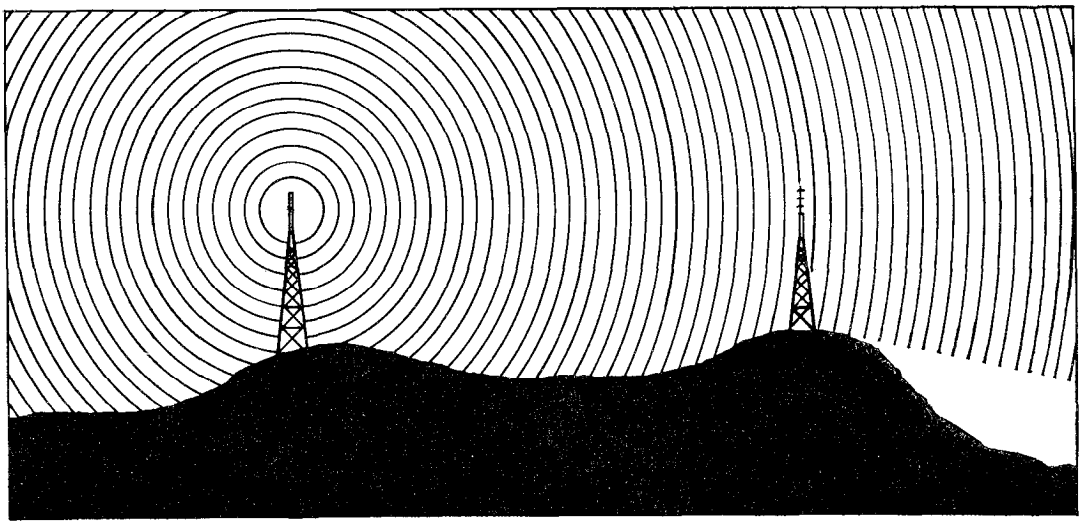
The broken line indicates routes over which only control telephone circuits are yet permanently available.

DX-Alliansen, Box 3108, Stockholm 3, Sweden.

DX-Alliansen is an organisation founded ten years ago by the Swedish DX-Clubs, governed and controlled by them. There has always been comparatively many DX-clubs in Sweden and, of course, they have much in common. The purpose of DX-Alliansen is to serve the clubs in respect to all common interests and problems, to represent them in Sweden and internationally. The interest for DX-Alliansen among the clubs has, of course, varied somewhat, but in the whole the interest has always been at a high level. One of the main reasons for this is probably the yearly **DX-Parliament,** a gathering in which clubs and DX-ers are taking part together with for every year a rising amount of representatives of radio stations and radio organisations in Europe.

DX-Alliansen publishes monthly a bulletin, Allians-Nytt. An English edition is published several times a year, and is distributed by Radio Sweden's DX-bulletin. DX-Alliansen also has a special DX-badge for different numbers of verified countries.

DX-Alliansen appreciates correspondence with foreign DX-clubs to exchange views and to discuss common problems.



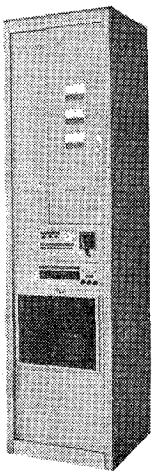
Filling in the shadows

To increase the coverage of UHF television stations and to fill in the 'shadows' in main station coverage caused by uneven features of the terrain, STC has produced the FT.1-A medium power television translator for combined vision and sound channels. STC has received orders from the British Broadcasting Corporation for bands IV and V translators and from the Independent Television Authority for band III equipments.

The use of solid state techniques virtually eliminates the risk of failure and consequent shut-down. The travelling wave tube power amplifier guarantees long service. Such is the reliability of the FT.1-A that the stations can run entirely unattended for long periods. Standby equipment is generally unnecessary and the need for skilled maintenance reduced to a minimum.

□ Suitable for European and American systems □ Suitable for monochrome and colour transmissions □ Designed for unattended operation □ Common circuits for sound and vision □ Extensive use of solid state techniques □ TWT Power amplifier □ Front access for ease of maintenance.

Standard Telephones and Cables Limited, Radio Division, Oakleigh Road, New Southgate, London N.11. Telephone: ENTerprise 1234. Telex: 261912.



world-wide telecommunications and electronics **STC**

66/13E

COLOUR-TELEVISION STANDARDS FOR EUROPE

by Georges Hansen
Director of the Technical Centre of the European Broadcasting Union
Vice-Chairman of C.C.I.R. Study Group XI (Television).

Georges Hansen

In the Article that I wrote at the end of 1965 for the 1966 World Radio TV Handbook, I did not express much hope that it would be possible to agree at the C.C.I.R. Plenary Meeting in Oslo in 1966 on a common colour-television system for all the countries of Europe. This did not prevent the E.B.U. Ad-hoc Group on Colour Television, under the chairmanship of Professor Theile, from continuing to work on the detailed specifications and on assessing the relative advantages and disadvantages of the systems taken into consideration: the NTSC, SECAM (or more precisely SECAM III) and PAL systems. Short descriptions of the three systems were given in my last article and a more complete study appears in the Report of the E.B.U. Ad-hoc Group on Colour Television, Second Edition, February, 1965, and in the Amendments to that Report issued in February, 1966.

Demonstrations of the PAL and SECAM III systems were given in Rome by the RAI under the auspices of the E.B.U. at the beginning of May, 1966 for the benefit of delegates from broadcasting organisations, Telecommunication Administrations and industry from all interested countries of Europe. The O.I.R.T. was also represented at these demonstrations, which were of great interest and very comprehensive.

A new system, known as NIIR or SECAM IV, was studied by a Franco-Russian team and also by some other laboratories in Europe, but was not officially proposed nor taken into consideration before the Oslo Conference. At the Oslo Conference all efforts to find a compromise whereby a single colour-television system might be recommended for the 625-line standard failed, including the proposal to postpone by six months the start of the colour-television services in those countries which wanted to do so in the autumn of 1967, and to study in common the SECAM IV system. The situation at the end of the Oslo Conference, that is on 22nd July, 1966 was the following as far as the European Broadcasting Area is concerned. This Area, it must be remembered, comprises geographical Europe plus the countries of Africa and Asia Minor that border the Mediterranean.

15 delegations indicated a preference for SECAM, 12 for PAL, 3 for SECAM IV and 6 delegations indicated no preference or abstained. The countries whose delegations opted in favour of SECAM fall into two geographical groups: those in the east of Europe including all those "beyond the Iron Curtain" plus Greece and Yugoslavia and those in the west of Europe, namely France and Monaco. Between these two groups lie the countries in favour of the PAL system, in central and northern Europe, stretching from Italy to Iceland. A choice has still to be made by those countries whose delegates opted for the SECAM IV system, or indicated no preference, or abstained. These countries are: Austria, Belgium, Luxembourg, Portugal, and Spain in Europe, Israel, Jordan and Turkey in the Near East, and Tunisia in North Africa. It should be noted that some North African countries not represented in C.C.I.R. Study Group XI in Oslo have not made their preference known; this is the case, for instance, for Morocco and the United Arab Republic.

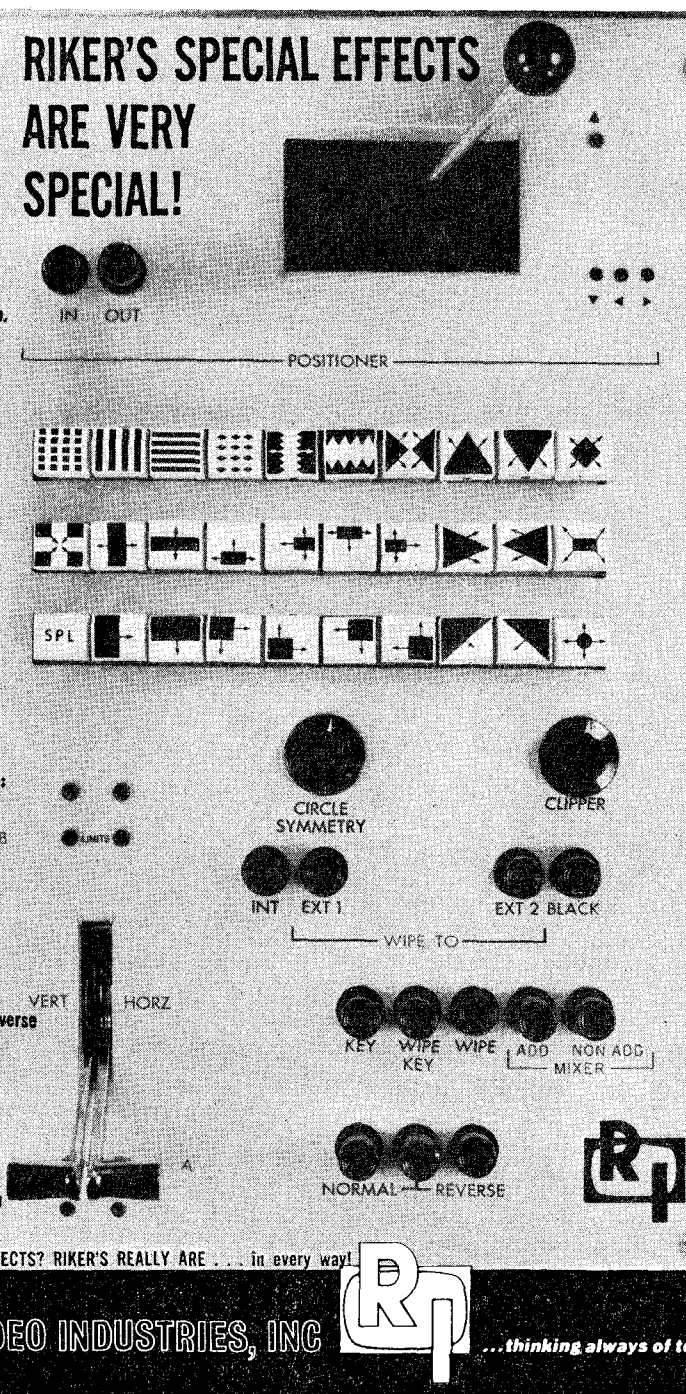
It seems now certain, unfortunately, that there will be two different colour-television systems in Europe. France, the Federal Republic of Germany, the United Kingdom and the U.S.S.R. announced their intention to start regular public colour-television services in the autumn of 1967, France and the U.S.S.R. using SECAM III, Germany and the United Kingdom using PAL.

This situation is unfortunate because it is going to complicate the exchange of programmes, whether by live relays or in the form of tape recordings. Moreover, receivers will cost more because of the lack of standardisation and the receivers to be used in the vicinity of the PAL-SECAM III "frontiers" will be still more complex and expensive. There is nothing that can be done now, but to try to remedy these drawbacks as much as possible. It is for the industry to tackle the problems of the receivers and especially the problem of the two-system receivers for use close to the frontiers. That is not an easy task considering that there are also different standards to be taken into account, not only because of the different number of lines but also because of the various 625-line standards adopted in the various countries. As far as the exchange of programmes is concerned, it will be necessary to develop transcoders for passing with a minimum loss of quality from SECAM III to PAL and vice versa and the E.B.U. is already organising work with this aim on the international plane. Provision will also have to be made to facilitate the exchange of programmes between North America in 525-lines: 60 fields (NTSC colour) and Europe in 625 lines: 50 fields (PAL or SECAM III colour), which is a more complicated problem as there is not only a transcoding operation, but also that of converting between systems having different numbers of fields and lines. This conversion problem also is being dealt with by the E.B.U. on the international plane and happily, a converter incorporating field- and line-storage by means of delay devices is being developed by the B.B.C. It will also be necessary to locate the transcoders on the Eurovision Network in such a manner as to avoid transcoding in cascade. Furthermore, the performance of the radio-relay circuits must be such as to transmit satisfactorily PAL and SECAM III signals in 625 lines as well as NTSC signals in 525 lines. Facilities for measuring the signals and monitoring the pictures will have to be provided on the radio-relay network wherever needed, which implies further – and rather urgent – work for the Telecommunication Administrations and broadcasting organisations in Europe; the E.B.U. is willing to undertake its co-ordination.

This, then, is the situation after the Oslo meeting of the C.C.I.R. I am sorry, after having reported year by year in the World Radio TV Handbook on colour-television systems for Europe, to have in the end to record this rather disappointing conclusion.

Continued page 30

RIKER'S SPECIAL EFFECTS ARE VERY SPECIAL!



You start with a basic 9 Wipe all-transistor system. Plugging in one additional module gives you 29 different basic wipes that can multiply into thousands by using two or more buttons simultaneously . . . thousands more than any other. Push-button selection allows instant changes of wipes "ON AIR". Expanding the Riker system is as simple as plugging in modules.

Here are modes of operation:
Key
Wipe
Wipe/Key
Mix/Wipe
Additive Mix
Non-Additive Mix
Non-Additive Mix/Wipe
Normal, Normal-Reverse, Reverse
Rainbow Insert
"Joy Stick" Positioner
Electronic Spotlight
Camera Scan Positioner
Modulated Wipes
Comp or non-comp operation

SPECIAL EFFECTS? RIKER'S REALLY ARE . . . in every way!

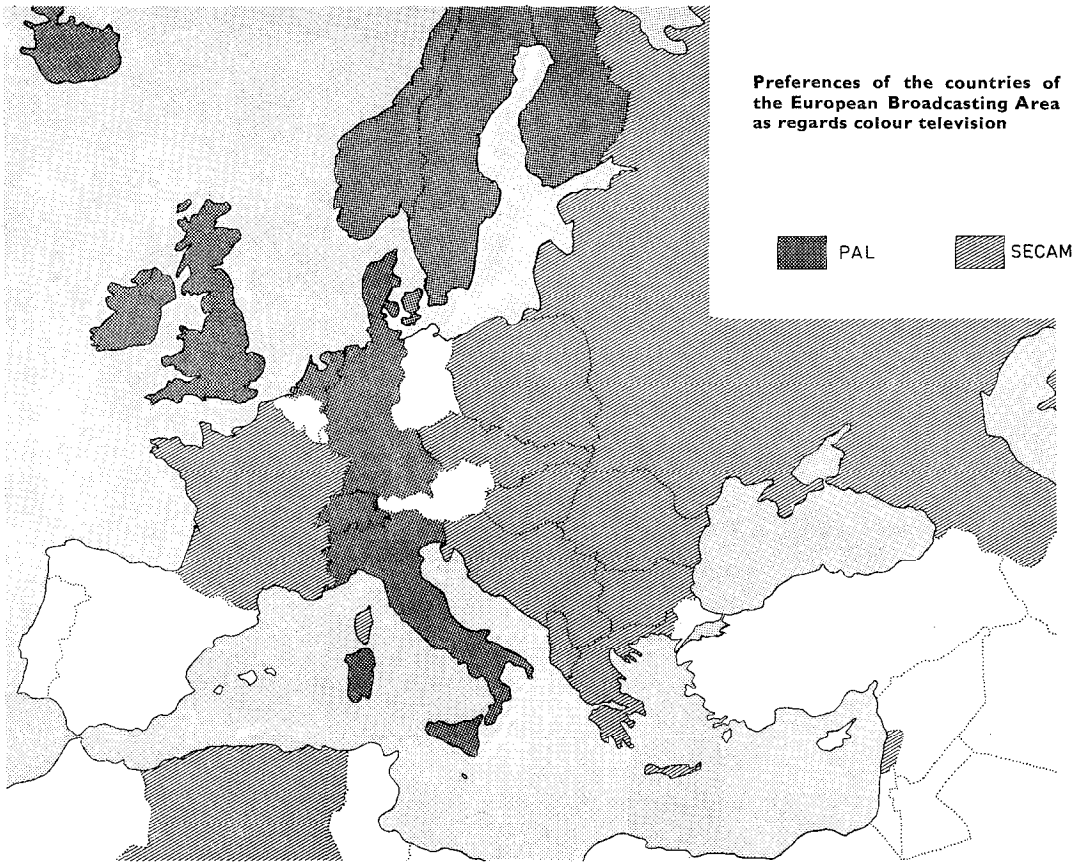
RIKER VIDEO INDUSTRIES, INC

. . . thinking always of tomorrow

EXPORT SALES REPRESENTATIVES: **JOSEPH PLASENCIA, INC.** CABLE: UNIONTEX

521 FIFTH AVENUE • NEW YORK, N. Y. 10017 • U. S. A.

Color-Television Standards for Europe *(Continued from page 28)*



This map of Europe indicates the countries whose delegations had, at the end of the C. C. I. R. XIth Plenary Assembly in Oslo, opted in favour of the PAL system or of the SECAM (or SECAM III) system. The countries depicted in white are those not represented in Oslo or whose delegations either expressed no preference, abstained or opted in favour of the SECAM IV system.

A MESSAGE FROM THE EDITOR

This edition of the WORLD RADIO TV HANDBOOK has been extended and kept up-to-date with the advice of specialists and consultants in the field of radio and television to assist those who desire to obtain as complete and practical information as possible about the various radio and TV stations throughout the world.

It has been our aim with the 1967 edition to enable everyone to have a complete and practical basis on which to start or continue listening to broadcasts (on shortwave in particular) from near and far-away countries and thus create the possibility for a better international understanding.

The WRTH 1967 has been written and compiled for *you* entirely. Consequently we will be more than happy to receive your criticism and suggestions with regard to improving and extending the contents of the present edition.

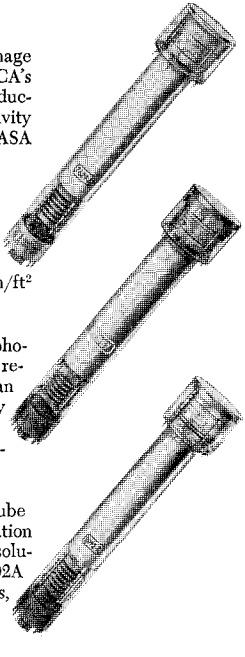
It would be impossible to list all the names of the many people whom we have consulted about the new material – friends who have made valuable contributions to this book. We thank them for their help and patience.

I want to thank specifically the many broadcasting and TV organisations, radio clubs, faithful contributors, advertisers, etc., who have made this edition possible.

J. M. Frost
Editor

From bright sunlight to overcast starlight

RCA thin-film semiconductive targets in Image Orthicons offer exceptionally stable performance in B/W and color TV



The RCA line of camera tubes includes three Image Orthicons—7629A, 7967, and 8092A—equipped with RCA's latest advance in TV technology, thin-film semi-conductive targets. They offer the high gain and tube sensitivity that can be equivalent to photographic film with an ASA exposure index of more than 10,000,000.

RCA-7629A. Easy to set up and simple to operate, this Image Orthicon makes possible very low-light-level studio operation and remote pickup. It is excellent for industrial service, taking good black-and-white pictures with scene illumination as low as 2 to 3 lm/ft^2 ... equivalent to film with an ASA index of 20,000.

RCA-7967. This Image Orthicon, with a multialkali photocathode features low target-to-mesh capacitance, reduced microphonics, and S-20 spectral response. It can reproduce black-and-white scenes under extremely low-light-level conditions. Its sensitivity is equivalent to photographic film having an ASA index of ten million or more!

RCA-8092A. An Image Orthicon with field mesh, this tube makes possible full color pickup with scene illumination as low as 40 lm/ft^2. A quality tube noted for high resolution over a wide range of incident light levels, 8092A is available in sets of 3 with color-mated characteristics, with the designation 8092A/S.

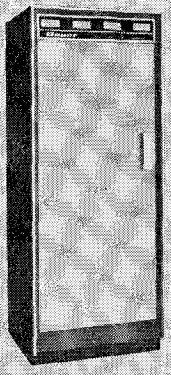
Check into RCA's line of Image Orthicons. You'll find the one that's right for your special application. See your local RCA distributor. For technical data, write to RCA International Division, Department 200, Central & Terminal Avenues, Clark, New Jersey 07066, U.S.A.
ALSO AVAILABLE THROUGH YOUR RCA INDUSTRIAL TUBE DISTRIBUTOR

RCA

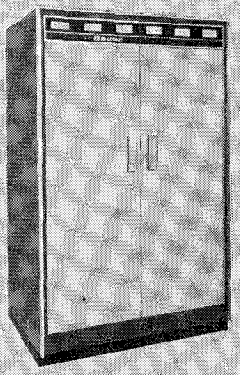
The Most Trusted Name in Electronics

Trademark(s) Registered Marca(s) Registrada(s)

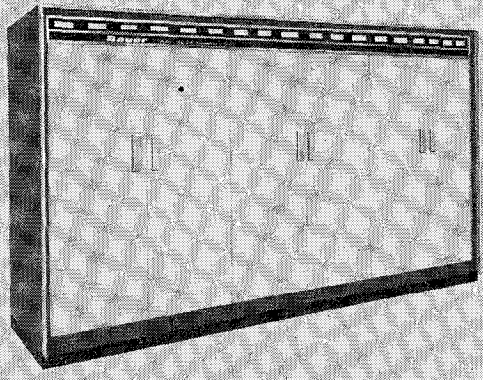
BAUER TRANSMITTERS & AUDIO EQUIPMENT



1 KW AM & FM TRANSMITTERS



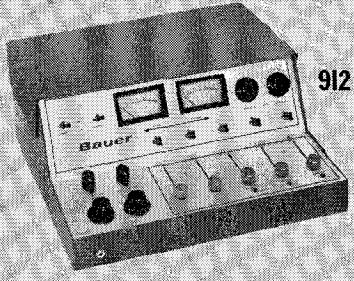
3 KW to 20 KW AM & FM TRANSMITTERS



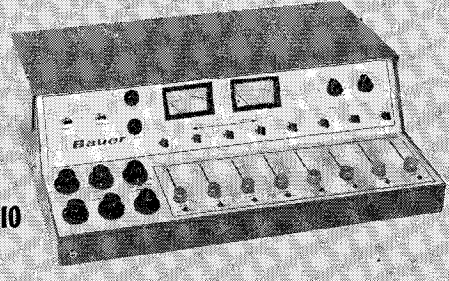
Model 750 - 50 KW AM TRANSMITTER

Bauer transmitters are designed to increase your performance and decrease your maintenance with all solid state rectifiers and fool-proof circuit protection with tally light overload relay systems, Automatic Power Control, the latest design in ceramic tubes, Remote Control Provisions, PLUS the lowest tube investment in the industry. Performance proven in 23 countries throughout the world.

AUDIO CONSOLES



912



910

912 Series — Provides five mixers, speaker *muting and cue facilities. All silicon solid* state. Available in Kit Form. 19" x 18" x 9". Monaural or stereo models available.

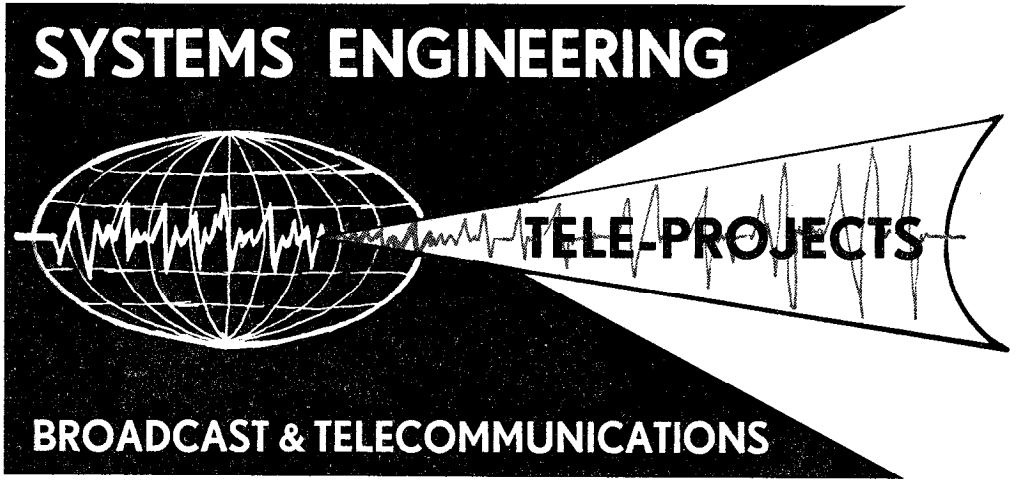
910 Series — Provides 8 mixers, talk back, *speaker muting and cue facilities. All sili*con solid state. Available in Kit Form. 28" x 18" x 9". Dual Channel or stereo models.

Look to Bauer for all your Broadcasting equipment: TRANSMITTERS, AUDIO CONSOLES, TRANSMITTER LOGGERS, AUDIO COMPONENTS, PHASING & COUPLING EQUIPMENT and REMOTE CONTROL SYSTEMS. Prices and delivery on request.

Bauer ELECTRONICS EXPORT DIVISION

30 East 42nd Street, New York, N.Y. 10017

a realistic practical approach to



Tele-Projects Incorporated provides a complete service, available for your entire project or any portion that you may require.

The service includes the following:

- **ECONOMIC STUDIES**
- **SYSTEM DESIGN**
- **ANTENNA DESIGN**
- **ROUTE SURVEYS**
- **PROPAGATION TESTS**
- **SPECIFICATIONS**
- **INSTALLATION**
- **TRAINING**
- **CONSULTING**

Tele-Projects Incorporated's staff of experienced engineers stands ready to serve you in any of the following fields:

TELECOMMUNICATIONS
BROADCAST
TELEVISION

We specialize in broadcasting systems designed for high power transmitter installations, the provision of special HF antennas and antenna switching systems. FM broadcast transmitters incorporating the rigid requirements for stereo and multiplexing. Special FM antennas providing extended coverage.

This diversified experience enables us to tackle any job with certainty, efficiency and provide our customer with an economical system which will conform to his specific requirements.

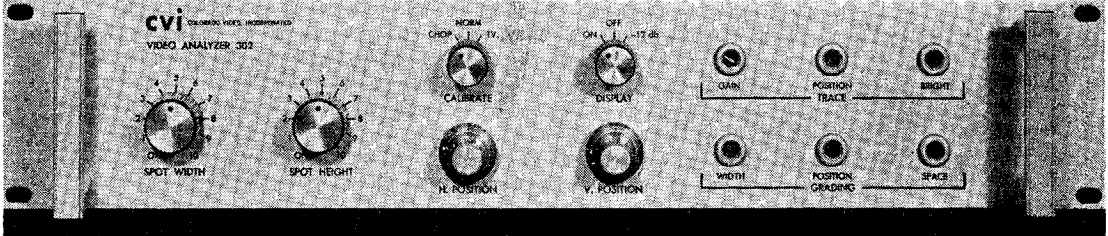
TELE-PROJECTS INCORPORATED

Communications Systems Engineers

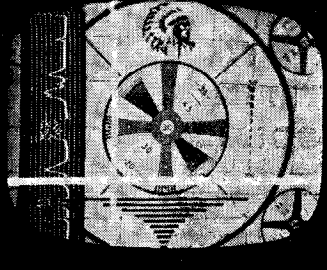
30 East 42nd Street · New York, N.Y. 10017 · Cable address: Telproject

Video Instruments for Research, Industry, Education, Broadcast.

Bar-Graph Displays, Video Analysers, Narrow-Band TV, Communications Equipment, Scan Converters, Signal Processing, Pulse Generators, Test Instruments



MODEL 302 VIDEO ANALYSER AND TYPICAL DISPLAY. THE 302 ALSO ALLOWS CHART RECORDING OF "LINE-SELECTED" WAVEFORMS ON EITHER SCANNING AXIS.



cvi

COLORADO VIDEO, INCORPORATED • EXPORT DIVISION (TELE-PROJECTS, INCORPORATED)
30 EAST FORTY SECOND STREET • NEW YORK, NEW YORK 10017 • CABLE: TELPROJECT N. Y.

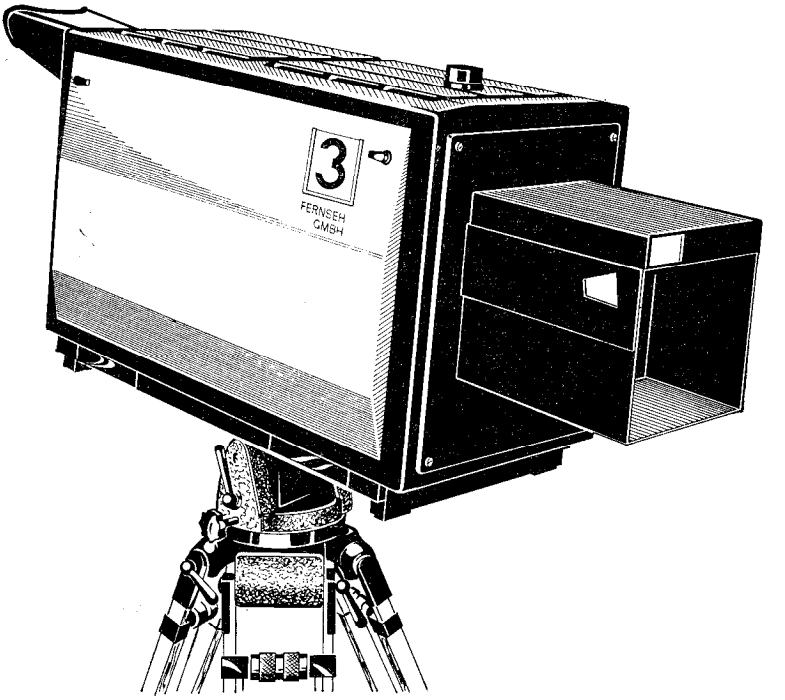
Advertisement

TV STUDIO EQUIPMENT
COLOUR AND MONOCHROME

IN TV-STUDIOS THROUGHOUT THE WORLD

Known for Quality and Reliability

Aarhus
Adelaide
Amsterdam
Ankara
Aruba
Baden-Baden
Bangkok
Barcelona
Berlin
Bern
Bilbao
Bogota
Bonn
Bremen
Brisbane
Brussels
Budapest
Buenos-Aires
Bulawayo
Bussum
Caracas
Cologne
Copenhagen
Curacao
Frankfurt
Genf
Göteborg
Hamburg
Hannover
Helsinki
Hobart
Innsbruck
Karatschi
Khartum
Kitwe
Kuala Lumpur
Lima
Lisbon
Luxemburg
Madrid
Mainz
Malmö
Melbourne
Milan
Munich
New Delhi
New York
Oslo
Paramaribo
Perth
Porto
Raisting
Rawalpindi
Rome
Rosario
Saarbrücken
Salisbury
Santiago
Skopje
Sydney
Stockholm
Stuttgart
Tampico
Townsville
Turin
Vienna
Wiesbaden
Zürich



3×3″ Image Orthicon Television Colour Camera

CAMERAS – FILM- AND SLIDE SCANNERS – MAGNETIC AND KINESKOPE RECORDERS – OB-VANS – MIXING, DISTRIBUTING, MEASURING AND AUXILIARY EQUIPMENT FOR TV-STUDIOS – IMAGE ORTHICONS – PHOTOMULTIPLIERS – CLOSED CIRCUIT SCIENTIFIC AND INDUSTRIAL EQUIPMENT.

FERNSEH GMBH

6100 DARMSTADT GERMANY – P.O. BOX 429 – TELEGR.: FERNSEH DARMSTADT

INTER-CONTINENTAL TELEVISION PROGRESS 1966 - FUTURE 1967

By Edgar T. Martin, Engineering Manager and George Jacobs, Chief Frequency Division Voice of America, U. S. Information Agency, Washington, D. C. 20547.

From its beginning on July 23, 1962, when the TELSTAR-1 satellite forged the initial link between Europe and North America, the evolution of inter-continental television has been marked by astonishing progress. The success of TELSTAR-1 was followed shortly by equally successful demonstrations of inter-continental television relays from the RELAY-1, TELSTAR-2, RELAY-2, SYNCOM-3 and MOLNIA-1 experimental communication satellites.

On June 28, 1965, three short years after the initial TELSTAR-1 television relay, a new era began for inter-continental television. On that date the EARLY BIRD satellite was placed into commercial service, marking the transition from the purely experimental to the commercial era for satellite communications.

During 1966, the concept of commercial satellite communications became af age, and with it, inter-continental television. Tens of millions of viewers in North America and Europe witnessed history in the making – live and immediate – as a result of the EARLY BIRD satellite. Inter-continental television relays became relatively commonplace through EARLY BIRD, and by October no fewer than 89 television programs, for a total time of 87 hours, had been relayed through the satellite. Thirty-six of these originated in North America and included such highlights as Gemini manned spacecraft launches, heavyweight championship boxing matches and Presidential news conferences. An equal number originated in Europe, highlighted by the British elections, President De Gaulle's visit to Russia, the World Cup Soccer matches, and heavyweight boxing matches. Fifteen television programs were relayed through EARLY BIRD from ships at sea, bringing to listeners in both Europe and North America live coverage of Gemini spacecraft "splash-downs" and recoveries. The technical quality of the programs relayed by EARLY BIRD rivalled that of local television broadcasts.

At a cost of approximately $ 7,500 for a minimum ten minute period, and $ 160 for each additional minute ($ 4,400 and $ 85 a minute during off-peak times), the EARLY BIRD satellite makes available to the broadcasting networks and organizations in North America and Europe a means for inter-continental relay of news and special event television programs on a sheduled, commercial basis.

The full significance of the EARLY BIRD satellite goes beyond the mere transmission of words and pictures. The satellite is owned and operated by INTELSAT, which stands for International Telecommunications Satellite Consortium.

INTELSAT is a world partnership to build, own and operate a single global commercial communications satellite system at the earliest practicable date, but with a goal set for 1967. The following 53 countries are presently participants in the INTELSAT effort, and several others are expected to join in the near future: Algeria, Argentina, Australia, Belgium, Brazil, Canada, Ceylon, Chile, China (Rep.), Colombia, Denmark, Ethiopia, France, Germany (Fed. Rep.), Greece, India, Indonesia, Iraq, Ireland, Israel, Italy, Japan, Jordan, Kuwait, Lichtenstein, Libya, Lebanon, Malaysia, Morocco, Monaco, the Netherlands, New Zealand, Nigeria, Norway, Pakistan, Portugal, Saudi Arabia, Singapore, South Africa, Spain, Sudan, Sweden, Switzerland, Syria, Thailand, Tunisia, United Arab Republic, United Kingdom, United States of America, Vatican City, Venezuela and Yemen. The EARLY BIRD satellite, or INTELSAT-1 as it is also called, and all future satellites in the INTELSAT system, are paid for and owned on a proportional basis, by

Continued page 38

GEORGE JACOBS

George Jacobs was born on July 16, 1924, in New York City. He received his B.E.E. degree from Pratt Institute, Brooklyn, N. Y. and his M.S.E.E. degree from the University of Maryland in 1960.

Mr. Jacobs is a representative of the Interdepartment Radio Advisory Committee (IRAC) and several other policy-level U.S. Government committees in the field of telecommunications. He has served as a delegate to several international broadcasting and telecommunication conferences, including the 1959 ITU Administrative Radio Conference, where he was the U.S. spokesman for high frequency broadcasting.

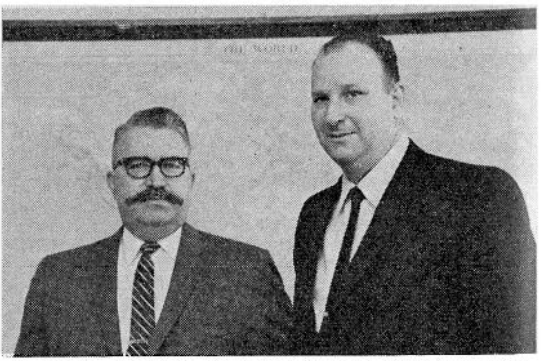
Most recently he attended the ITU's International Space Communication Conference and the Eleventh Plenary Assembly of the International Radio Consultative Committee (CCIR). Mr. Jacobs was the U.S. Delegation's spokesman for satellite broadcasting at both conferences.

Mr. Jacobs is a Senior Member of the IEEE, a member of URSI, and a registered Professional Engineer in the District of Columbia.

EDGAR T. MARTIN

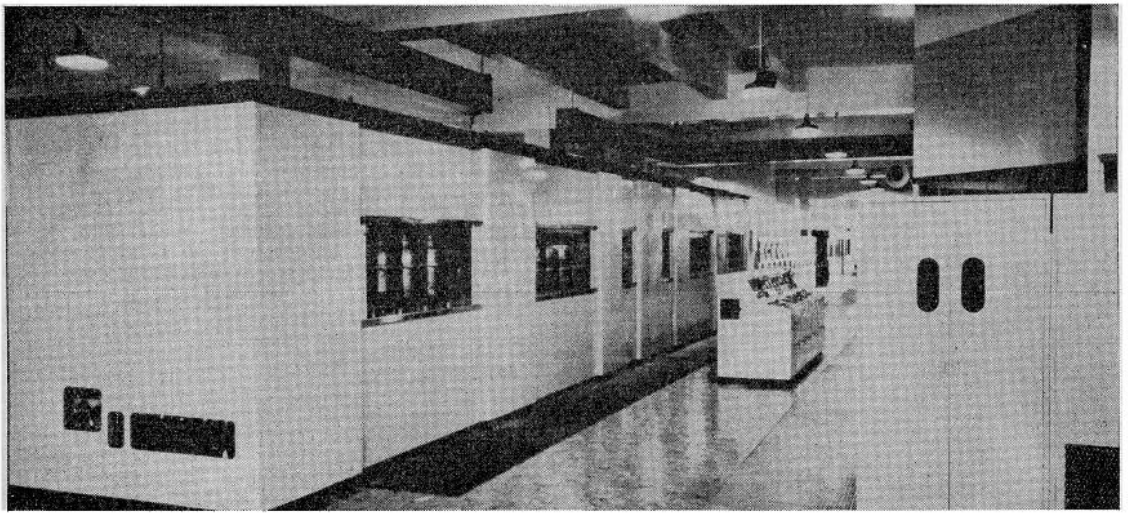
Edgar T. Martin was born on May 1, 1918, in Princetown, West Virginia. He received his B.S.E.E. in 1938 and his M.S.E.E. in 1953, both from Virginia Polytechnic Institute. He also holds an M.A. in Government from American University, conferred in 1957 and an LL.B. from George Washington University. In 1959, he earned his LL.M. from Georgetown University.

He is a registered Professional Engineer in Virginia and the District of Columbia, and he is also a member of the Virginia Bar. He has attended more than a dozen major international conferences dealing with broadcasting and telecommunications, and was a delegate to the ITU's Administrative Radio Conference held in Geneva.

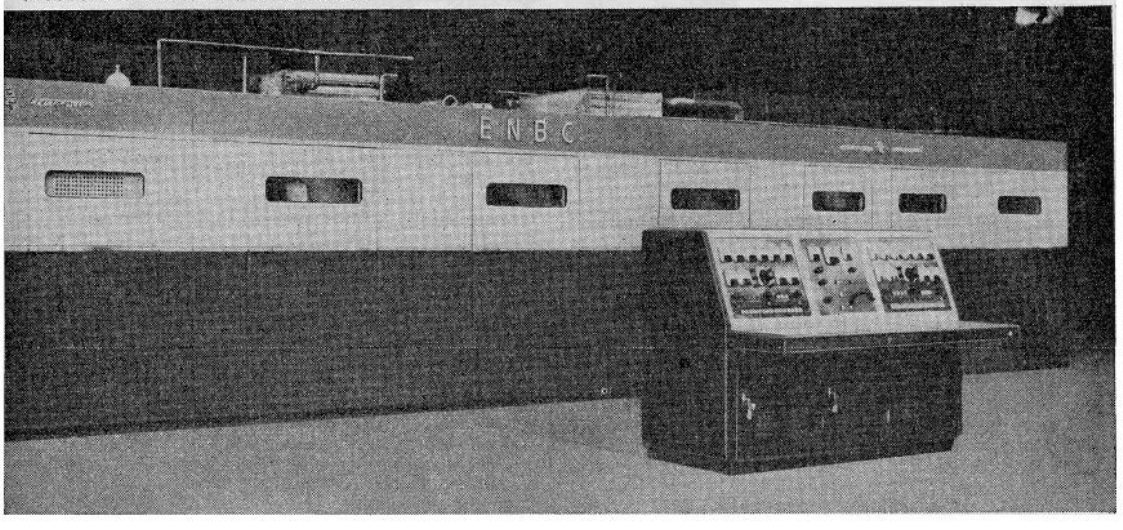


(Left) Edgar T. Martin, Engineering Manager, Voice of America. (Right) George Jacobs, Chief, Fre.uency Division, Voice of America.

CONTINENTAL ELECTRONICS SUPER POWER TRANSMITTERS AROUND THE WORLD



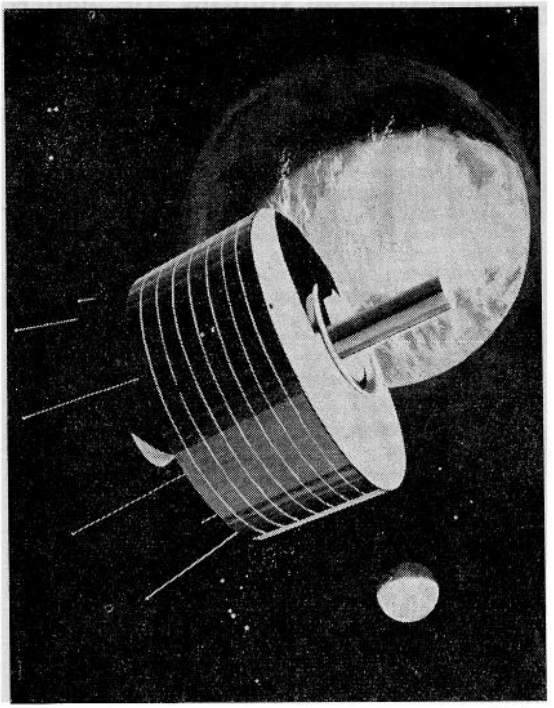
1,000,000 WATT MF BROADCAST TRANSMITTERS
Partial view of USIA's Philippine Relay Station shows Continental's 1,000,000 watt MF transmitter which has been operating since 1953. Continental is building a similar installation for the USIA in Thailand. Other Continental 1,000,000 watt transmitters are installed in Germany, Okinawa and Egypt. A sixth 1,000,000 watt transmitter was divided into two 500,000 watt transmitters for installations in Greece and the island of Rhodes.



500,000 WATT MF BROADCAST TRANSMITTERS
Continental's 500,000 watt MF transmitter for the Eastern Nigeria Broadcasting Company in Nigeria. Another Continental 500,000 watt MF transmitter was installed for Trans World Radio on the island of Bonaire in the Netherlands Antilles.

Continental transmitters range from 5,000 watts to 1,000,000 watts. For descriptive brochures, write: Continental Electronics Mfg. Co.; Box 17040; Dallas, Texas 75217.

Continental Electronics
A SUBSIDIARY OF LTV ELECTROSYSTEMS, INC.



This 56-inch INTELSAT-2 satellite, larger and more powerful than Early Bird, is scheduled to be in operation by the Fall of 1966 to link North America with countries in the Pacific area. Looking down from its synchronous perch 22,300 miles above the Pacific, the satellite initially will link the earth stations to be constructed by the Communications Satellite Corporation at Paumalu in Hawaii, and Brewster Flat, Washington, as well as earth stations in Japan and Australia. Additional earth stations are expected to be built in the future by other Pacific area countries. Like Early Bird, now bridging the Atlantic between North America and Europe, the more powerful satellite will be capable of relaying inter-continental television programs. (Intelsat Photo)

each member of the consortium. The Communications Satellite Corporation (COMSAT) represents the U.S.A. on INTELSAT, and acts as manager on behalf of the 53-nation consortium.

On July 29, COMSAT, acting on behalf of INTELSAT, signed an agreement with the U. S. National Aeronautics and Space Administration (NASA) providing, on a reimbursable basis, launching and associated services by NASA for two new INTELSAT commercial communication satellites to be launched during the fall of 1966. The agreement also covers a possible additional launching to replace EARLY BIRD, presently in use over the Atlantic Ocean, when a replacement is needed.

The two new satellites, to be called INTELSAT 2A and 2B, will be placed into synchronous orbits, one over the Pacific Ocean to link eastern Asia with the western part of North America and the other over the Atlantic Ocean to link most of Europe, Africa and the Near East with the western hemisphere. The new satellites will have two and a half times the power of EARLY BIRD, will contain 240 channels and will be capable of inter-continental television relay.

Planning for further expansion of its globe-girdling commercial communication satellite system, INTELSAT has under construction four huge satellites, each containing 1200 channels and capable of simultaneous transmission of at least two television relays. It is planned to orbit two of these giant satellites over the Atlantic Ocean, one over the Pacific and the other over the Indian Ocean, by 1968.

Another significant step in the development of inter-continental television took place on April 25, 1966, with the successful launching of the MOLNIA (Lightening)-1C satellite by the Soviet Union. Two other MOLNIA satellites were launched during 1965. According to Soviet officials, the MOLNIA satellites furnish a fourteen-hour daily communications and television link between the Moscow and Vladivostok centers, over a distance of 7500 kilometers (4500 miles). They are also reported to have the capability of transmitting three hours a day from Russia to North and Central America. During 1966, MOLNIA-1C was used successfully to conduct experimental color television transmissions between Paris and Moscow.

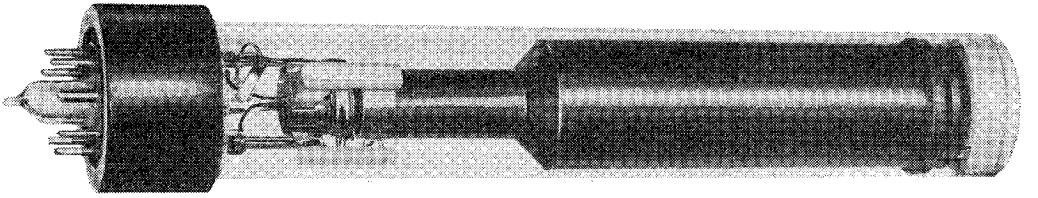
The possibility of using satellites for broadcasting radio and television programs directly to home receivers continued under active investigation during 1966. At Oslo, Norway, several hundred engineers, scientists, and government officials from more than 90 countries gathered this summer for the 11th Plenary Assembly of the International Radio Consultative Committee (CCIR). The CCIR, a specialized committee of the International Telecommunications Union, is responsible for studying technical and operating problems in the field of radio communications. The subject of broadcasting satellites came under discussion at the Oslo meetings, and the world's experts on this subject drafted a comprehensive study program dealing with the problems relating to the development of such a satellite. The CCIR will endeavor, between now and the next Plenary Assembly which is scheduled to convene in 1969, to determine the answer to such questions as what frequency bands are most suitable for satellite broadcasting; can frequencies be shared between satellite and terrestrial broadcasting stations; what field strength and transmitter power will be required to produce a satisfactory signal from a broadcasting satellite at a home receiver, and what are the optimum orbital and transmission parameters for such a satellite. The CCIR, recognizing that there are significant variations between television transmissions standards throughout the world, also recommended that the study determine if a new, world-wide television standard could be developed for satellite broadcasting, and if satisfactory results can be obtained with such a standard on existing receivers with a minimum number of changes to the receiver, or by the use of relatively simple and inexpensive adapters. The study will also investigate the possibility of designing future television receivers with the capability of receiving broadcasts directly from satellites as well as from terrestrial stations.

While the development of a direct broadcasting satellite is under active study by the world's experts, there are a number of complex problems remaining to be solved before it can become a reality. It has been estimated that, except perhaps for experimental transmissions, a satellite capable of broadcasting television programs directly to home receivers could be ten or more years away.

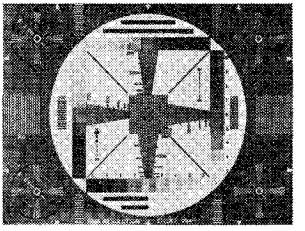
An interim step to a broadcasting satellite may be the use of a high power satellite for relaying television programs to a network of specially designed earth receiving stations, which would then rebroadcast the programs to home receivers through conventional terrestrial television stations. The receiving stations would be considerably less complex and less expensive than the earth stations used in conjunction with communication satellites, and could be located at terrestrial television stations. The Ford Foundation has recently proposed such a

Continued page 44

PHILIPS
PLUMBICONS



FOR COLOUR AND MONOCHROME



high sensitivity
fast response
independence of light level
small size
less technical complexity

ADVANTAGES THAT ARE TRIPLED IN COLOUR TV

Philips Plumbicon TV camera tubes provide better pictures with less technical complexity, particularly in colour cameras.

Plumbicons are the latest development in TV pick-up tubes, in which the best properties of both vidicon and image orthicon tubes have been combined.

PHILIPS PLUMBICON
the most advanced TV camera tube

SOLAR ACTIVITY IN 1967

by Prof. Dr. M. Waldmeier, Zürich.

Prof. Dr. M. Waldmeier

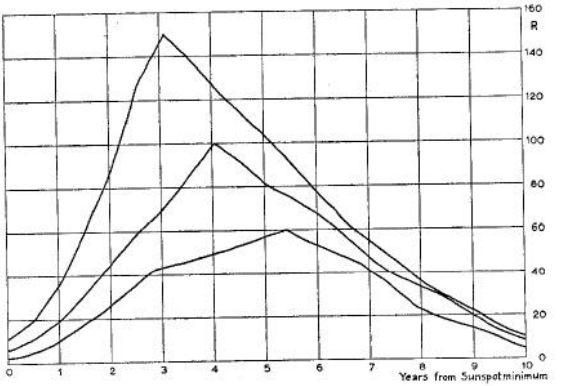
Sunspot activity was at its minimum in July, 1964. After that time the activity first increased but slowly. Throughout the year 1965 the sunspot-numbers remained at almost a constant level. It was only in April 1966 that a rather sudden and strong increase of solar activity occurred. Table 1 gives the monthly sunspot-relative-numbers from the year of minimum through August 1966. These numbers are calculated by the following formula: $R = k\,(10\,g + f)$, f being the total number of spots, g the number of spot-groups and k a coefficient to reduce the personal countings to the Zürich standard scale of the relative-numbers R. These numbers are now known for more than two centuries.

The mean length of the sunspot cycle amounts to about 11 years. In general the time of increase from minimum to maximum is shorter than the interval of declining activity. The length of the ascending branch may be as short as 3 years and as long as 7 years. Its mean value is about 4 years. Therefore the next maximum of sunspot activity may be expected for 1968.

Table 1. Monthly Sunspot-Relative-Numbers 1964–66

	Jan.	*Feb.*	*Mar.*	*Apr.*	*May*	*June*
1964	15.3	17.7	16.5	8.6	9.5	9.1
1965	17.5	14.2	11.7	6.8	24.1	15.9
1966	26.7	23.5	24.5	47.5	43.7	46.4
	July	*Aug.*	*Sep.*	*Oct.*	*Nov.*	*Dec.*
1964	3.1	9.3	4.7	6.1	7.4	15.1
1965	11.9	8.9	16.8	20.1	15.8	17.0
1966	55.7	48.8				

More reliable predictions can be made by using the properties of the sunspot curves, and this is the method by which the author has predicted the sunspot maxima of the years 1937, 1947 and 1957. To eliminate the month by month fluctuations of the sunspot-numbers we use the so-called smoothed sunspot-numbers; these are 12-month running means of the observed numbers. The largest smoothed sunspot-number R_M characterizes the cycle. R_M varies strongly from one cycle to another. For cycles of weak activty R_M may be as low as 49, whereas for the strongest cycle on record R_M was 201. The mean value of R_M is around 100. In Fig. 1 three curves for the smoothed sunspot-numbers are given, namely for R_M = 60, 100, and 150 respectively. The whole run of a single sunspot curve is determined by the corresponding value of R_M. If R_M can be predicted, the value of R at any given time can be calculated. For example it follows from Fig. 1 that R_M increases as the rising time T from minimum to maximum decreases. This relationship can be expressed by the formula: $\log R_M = 2.73 - 0.18\,T$, when T is measured in years. The individual sunspot curves differ largely at the beginning of the cycle: a slow increase leads to a low maximum that comes late, a steep increase is followed by a high maximum with a short rising time. Up to August 1966 the rising branch of the sunspot activity fits best into the curve for R_M = 110. With this value and the above mentioned formula one gets T = 3.8 and consequently for the time of sunspot maximum May 1968.



If the individual sunspot curves corresponding to different values of R_M are superposed in such a way that all the maxima are coinciding, then all the curves intersect near the point R = 50. This point is 1.8 years ahead of the sunspot maximum. As we are now in the middle of the ascending branch, it should not be difficult to make a prediction for the time when the smoothed sunspot-numbers will have reached the value 50. This seems to be the case in June 1966. Therefore the maximum has to be expected for April 1968. With this value and with R_M = 110 one gets the following predictions for the smoothed sunspot-numbers: 60 for the beginning of 1967, 90 for the end, and 74 for the mean. During the last solar cycle a similar level of activity was observed at the end of 1955 and at the beginning af 1961. Therefore conditions of short wave communications in 1967 will be similar to that of these two earlier epochs.

FINLANDS DX-CLUB INTERNATIONAL

the Club for You!

Club paper ATTENTION B, 10 times a year including up-to-date DX-hints and features written by experts on DX-ing.

Membership fee only US $ 2.00 or 15 I. R. C's a year (by air mail to Europe and North America US $ 3.00 or 23 I. R. C.'s.

Sample copy of ATTENTION B for one I. R. C. Send today for details to: FDXCI, Box 10214, Helsinki 10, Finland.

REMEMBER!

Your DX-programme "The DX-Mailbag Show" on the air Fridays at 16.00–17.00 GMT and Saturdays 12.15–13.15 GMT on 15185, 11805 and 9555 kc/s. "Finlandia Mixture" now on Saturdays at 16.00–16.30 GMT and Sundays at 12.15–12.45 GMT on the same frequencies. All programmes in English from the Finnish Broadcasting Company are produced and presented by Finlands DX-Club, Box 10214, Helsinki 10, Finland.

Finlands DX-Club is first with the news – on the air and in print!

MAY WE KEEP YOU INFORMED ABOUT ALL NEW WRTH EDITIONS AND SUPPLEMENTS

For **free** mailing of brochures covering all new WRTH editions send a postcard to us today, stating complete name and address.

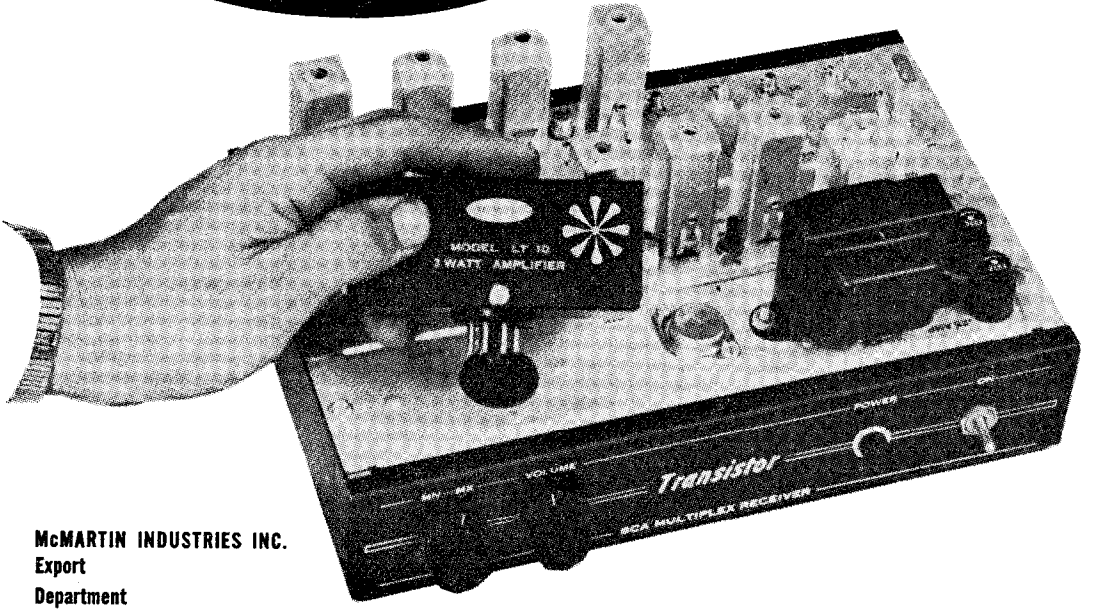
WORLD RADIO TV HANDBOOK CO. LTD.
Sundvej 6, Hellerup, Denmark.

McMartin Goes Piggyback

New LT-10, 3-watt transistor-amplifier, mounts piggyback on our SCA Multiplex TRANSISTOR Receiver, TR-66.

Here's new convenience for background music operators. For small installations with few speakers, use the LT-10 for amplification. It just plugs in — no wiring necessary. ■ Our transistor receivers have many special features and conveniences. Modular construction permits easy replacement of power supply, main channel or sub-channel circuitry. Servicemen always appreciate the plug-in transistors and straight-line design with convenient test points. No other manufacturer can guarantee sensitivity of 2 uv/50db or crosstalk of -55db or better. ■ McMartin is the leading producer of SCA Multiplex Receivers. The workmanship of McMartin Receivers is guaranteed *forever*. We can make this bold warranty because 20% of our production people are in final testing of your equipment.

McMartin®



McMARTIN INDUSTRIES INC.
Export
Department

ROCKE INTERNATIONAL CORPORATION
13 EAST 40th STREET, NEW YORK, N. Y. 10016

RADIO BROADCAST RECEPTION CONDITIONS EXPECTED DURING 1967

By George Jacobs, Chief, Frequency Division, Voice of America, U. S. Information Agency, Washington, D. C. 20547

By international agreement, broadcasting stations are allocated the following specific bands in the radio spectrum:

LONG WAVE (Low Frequency)		MEDIUM WAVE (Medium Frequency)	
Kilocycles	Meters	Kilocycles	Meters
150–285	1053–2000	525–1605	187–571

SHORT WAVE

Tropical Broadcasting Bands

Kcs.	Megacycle Band	Meter Band
2300–2495	2	120
3200–3400	3	90
4750–5060	4	60

HIGH FREQUENCY BROADCASTING BAND

Kcs.	Megacycle Band	Meter Band
3900– 4000	3.9	75
5950– 6200	6	49
7100– 7300	7	41
9500– 9775	9	31
11700–11975	11	25
15100–15450	15	19
17700–17900	17	16
21450–21750	21	13
25600–26100	25	11

While the majority of the world's broadcasting stations operate within these bands, some operate outside. Most out-of-band operations, however, take place on frequencies adjacent to, or on the edge of the bands allocated for broadcasting.

The Long-Wave band (used in Europe) and the Medium-Wave Band (used worldwide) while allocated mainly for domestic broadcasting, are used also for some international broadcasting to adjacent countries. Although long and medium-wave stations are normally heard only for moderate distances, long-distance reception is possible over dark transmission paths, mainly during the fall, winter and spring months in the reception area.

The Tropical Broadcasting Bands are assigned for use for domestic broadcasting in tropical areas, where high atmospheric noise levels limit the service area of medium-wave stations. DX reception on these bands is best when the transmission path between the transmitter and receiver is all or mostly in darkness. These bands are used mainly by stations in Latin America, Africa, South and Southeast Asia, and Oceania.

The High Frequency Broadcasting Bands, or short-wave bands as they are also called, between 3.9 and 26.1 megacycles (11 and 75 meters) are used for both international and domestic broadcasting. These bands are allocated for worldwide use, except that the 3.9 and 7 Mc bands are not allocated for broadcasting in the American area. Also, the 3.90 to 3.95 Mc portion of the 75 meter band is used only in Asia and Oceania.

Reception conditions on these bands vary according to the time of day and season of the year. Most of the international broadcasting stations make seasonal changes in frequency usage, mainly on the first Sunday of March, May, September and November. Changes may often be made at other times during the year, due to interference, change of program times, addition of new transmitters, etc. A large percentage of the domestic broadcasting stations operating in the high frequency bands do not make seasonal changes, but some, particularly the stations in India, Pakistan, USSR and South Africa, do make seasonal shifts.

Short-wave, long-distance medium, and long-wave broadcast reception is possible only because of the existence of an electrified region high in the earth's atmosphere. This region, electrified by nature, is called the *ionosphere*. It is the ionosphere, acting somewhat like a mirror, that reflects radio signals over great distances.

The ionosphere is believed to be caused, at least in part, by ultraviolet radiation given off by the sun. The amount of radiation illuminating the ionosphere varies hourly, seasonally and geographically, depending upon the relationship between the sun and the earth. Reception is usually better on the higher frequency bands (15, 17, 21 and 25 Mc) when the sun is more directly overhead or closer to the earth, for example, during the daylight hours, during the winter season, and in tropical or southern regions. Reception in the lower frequency bands (3.9, 6, 7, 9 and 11 Mc) is usually better when the sun is lower in the sky, or farther from the earth, for example, during the hours of darkness, during the summer season, and in temperate and northern geographical areas.

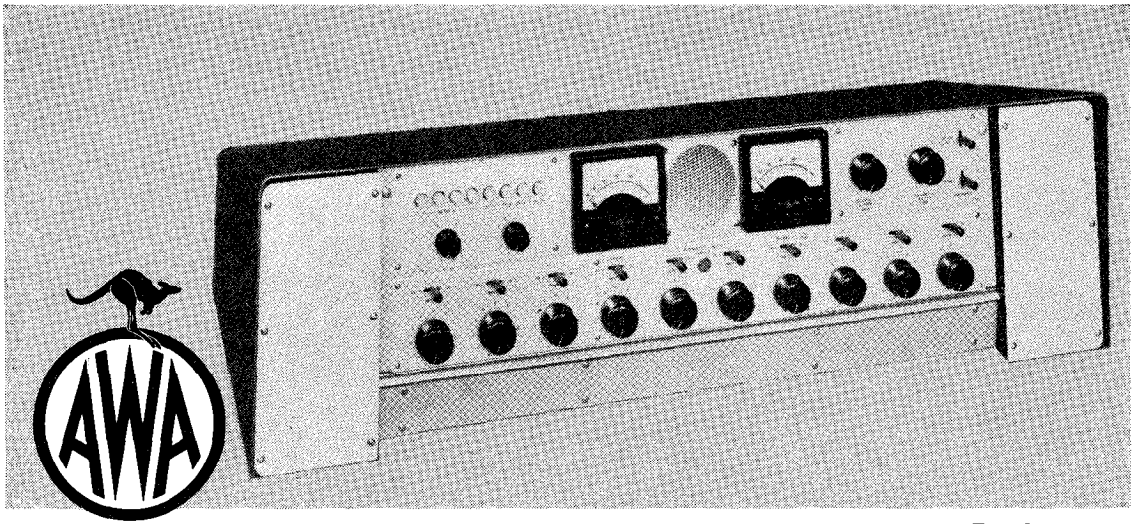
In addition to hourly, seasonal and geographical changes in reception conditions, there is a year-to-year change over an approximate 11-year cycle.

For reasons not yet fully understood by scientists, this 11 year cycle change appears to result from the difference in the number of sunspots appearing on the face of the sun. When the sun's surface is covered with a great number of spots, the ionosphere is electrically strong and long-distance radio reception is often at its best; when the number of sunspots diminishes, reception becomes poorer. During 1957–61, when the sunspot cycle was at or near its maximum, reception conditions were at their best. During the years 1963–66, there were few sunspots on the face of the sun, and reception conditions were considerably poorer.

A new sunspot cycle began during October, 1964, and the number of sunspots are now on the increase. According to solar observations made with powerful telescopes at the Zurich Solar Observatory, the new cycle began with a sunspot number of 10, and climbed slowly to a level of approximately 60 by the end of 1966. Sunspot activity during 1967 is forecast to increase to a level of approximately 100 by the end of the year. This is a moderately high level of solar activity, and should result in a noticeable improvement over last year in short-wave reception conditions, especially in the 11, 13, 16 and 19 meter bands.

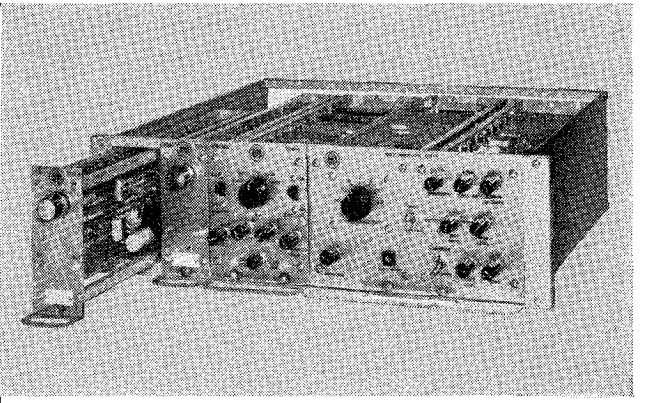
The following is a general summary of reception

Continued page 44



Australia's largest manufacturer of Broadcast and Television Equipment

AWA manufactures a comprehensive range of broadcast and television transmitters. Two out of every three broadcasting stations in Australia and New Zealand have been designed and built by AWA while over 100 television transmitters have been supplied, or are on order for Australian and overseas stations. As a major manufacturer in this field the Company can offer a wide range of the latest transistorised sound and vision equipment.



TOP: *10 Channel transistorised sound control console.*

BOTTOM: *Transistorised studio vision equipment.*

For further particulars please contact Engineering Products Division

AMALGAMATED WIRELESS (AUSTRALASIA) LIMITED

P.O. BOX 2516, SYDNEY, N.S.W., AUSTRALIA

Radio Broadcast Reception Conditions

(Continued from page 42)

conditions expected on each short-wave broadcasting band during 1967:

25 Mc band (11 meters)
As the sunspot cycle rises, more and more stations are expected to use this band for long-distance broadcasting. During 1967, it should be possible to receive a fair number of stations in this band, over distances of many thousands of miles during the daylight hours. World-wide reception will be best during the late fall, winter and early spring months, and it should be possible to receive stations located in southern and tropical regions throughout the year.

21 Mc band (13 meters)
Reception of exceptionally strong signals over distances of many thousands of miles, from almost all areas of the world should be possible during the daylight hours, or when it is daylight at one end of the path, and early evening at the other end. With the level of sunspot activity forecast for 1967, many stations will use this band more and more throughout the year, and considerable congestion is expected.

17 Mc band (16 meters)
Excellent long-distance reception of stations from all areas of the world should be possible in this band throughout the year from shortly after dawn through the early evening hours. Since many stations are expected to use this band during 1967, a high level of congestion is expected to occur.

15 Mc band (19 meters)
Propagation conditions in this band are expected to be excellent for the reception of both long-distance stations many thousands of miles away and stations from medium distances of a thousand miles, or so. The band is expected to be full of stations with exceptionally strong signals from shortly after sunrise, through the daylight hours and into the early evening. During the summer months, excellent reception may often be possible during the nighttime hours as well. Exceptionally long-distance reception is more likely to occur for a short period after sunrise, and again during the late afternoon and early evening hours. Medium-distance reception should be best during the late morning and afternoon hours.

11 Mc band (25 meters)
This is expected to be an excellent band for medium-distance reception during the hours of daylight. During this period, at any season of the year, exceptionally strong signals should be received from stations that are between approximately 600 and 2200 miles away (1000 and 3750 km). Long-distance reception from stations several thousand miles away, should be possible for a short period after sunrise, and again during the late afternoon and early evening hours. During the summer months, long-distance reception also should be possible during the hours of darkness.

9 Mc band (31 meters)
This band is expected to be excellent for daytime reception over short-to-medium distances on the order of 400 to 1500 miles (700 to 2500 km). Fairly good long-distance reception, over many thousands of miles, should be possible throughout the year during the early evening hours, through the hours of darkness and until shortly after sunrise.

7 and 6 Mc bands (41 and 49 meters)
Excellent short-range reception is expected on these bands during the daylight hours for distances up to approximately 1000 miles (1750 km). During the fall, winter and early spring months, when local atmospheric noise levels are at their lowest values, fairly good medium and long-distance reception should be possible from shortly before sunset, through the hours of darkness and until shortly after sunrise. High static levels are expected to make long-distance reception somewhat difficult during the late spring and summer months.

4, 3, and 2 Mc bands (60, 90 and 120 meters)
These bands are mainly used for short-distance reception. During the hours of daylight, stations within a radius of a few hundred miles should be heard well. After sunset, and throughout the hours of darkness, the reception range increases, and during the late fall, winter and early spring months, good reception also should be possible of medium and long-distance stations within a radius of several thousand miles. During the summer months, high static levels are likely to limit reception in these bands to short-distances.

For more specific reception information please refer to the Table of the Most Suitable Meter Bands for 1967 (see page 60).

Inter Continental Television

(Continued from page 38)

distribution system for a nation-wide educational television network in the United States. The proposal is presently under study by the Federal Communications Commission.

In 1966, the concept of inter-continental television came of age. The year 1967 is expected to see continued progress in this field. INTELSAT satellites are expected to link almost all of the world's continents during 1967, and several additional ground stations are expected to be brought into service to supplement those already in operation in the United States at Andover, Maine, Hawaii and the state of Washington, at Goonhilly Downs, England; Pleumeur-Bodou, France; Raisting, Germany; Fucino, Italy; Grinon, Spain; Tokyo, Japan and Nova Scotia, Canada.

An invitation to tender has been issued recently for an earth station at Hong Kong. The station is planned for late 1967 operation, with the INTELSAT-2 Pacific satellite. It will link Hong Kong with existing earth stations in Japan, Hawaii and the state of Washington, and with earth stations planned for Australia, the Philippines and other locations in Southeast Asia.

The impetus responsible for the astonishing development of inter-continental television during the past four years shows no signs of slackening, indeed it appears to be gaining momentum. In light of developments during 1966, it can be predicted with confidence that the goal of a global commercial communication satellite system, with the potential for world-wide inter-continental television relay, will become a reality during 1967.

The new Marconi MARK V solid-state television camera

ALL SOLID STATE

Silicon transistors used throughout the chain to give outstanding stability and reliability. Constant output ensured despite mains variations, temperature changes or external fields. Easy access for tube changing. No image orthicon setting up controls.

SIMPLE CONTROL

Simple compact control panel, four of which can be mounted on a console desk, gives complete 'hands off' operation.

MINIMUM RACK SPACE

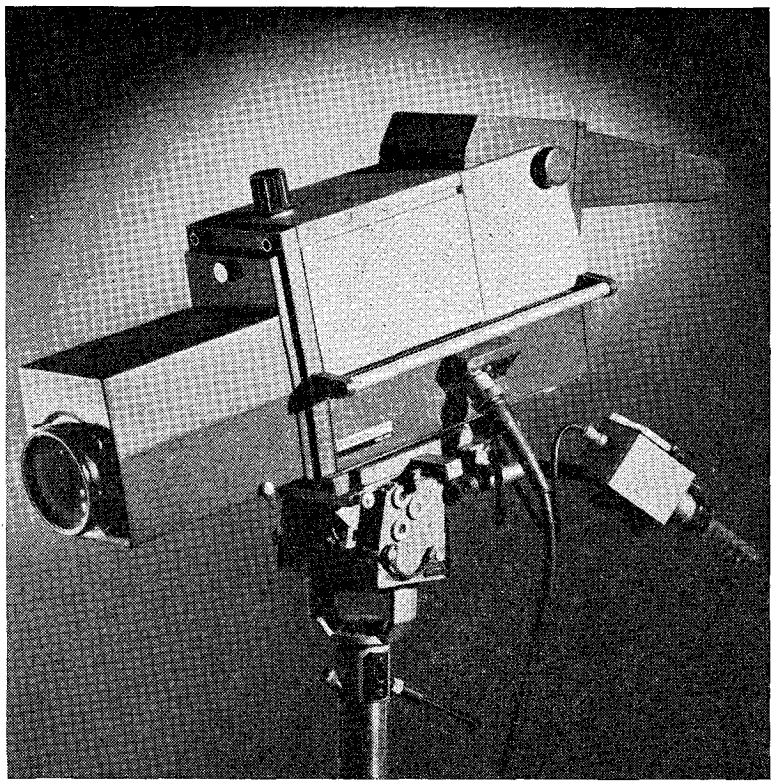
Single rack mounting camera control unit, control panel and power supply. Circuitry contained in seven plug-in printed wiring modules, giving easy front access for maintenance.

INTEGRATED ZOOM LENSES

Choice of servo or manually controlled zoom lenses gives infinitely variable focal length for exact picture framing. Simplified camera operation and improved programme continuity.

TILTING VIEWFINDER

Ensures most comfortable viewing position for all camera angles. Detachable up to 30 ft. from camera. Brilliant picture (200 ft.-Lamberts). Camera, external or mixed signals available at cameraman's choice.



The smallest, lightest 4½ in. Image Orthicon Camera in production, as simple to operate as an ordinary amateur photographic camera

Marconi television systems

The Marconi Company Limited, Broadcasting Division, Chelmsford, Essex, England LTD/B66

SHORTWAVE RADIO AND THE IONOSPHERE

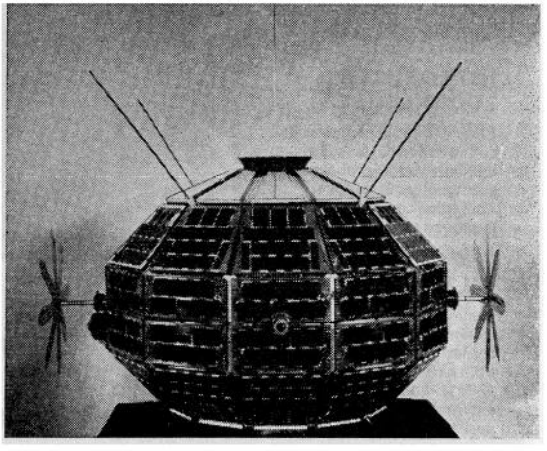
by Basil Duke, President – Radio Canada Shortwave Club.

S. B. Duke

What IS the ionosphere? And what part does it play in shortwave radio? Many new SWL and DXers will have asked themselves these questions – and well they might. Because, unless you have at least a basic knowledge of the tools of your hobby, you cannot get the maximum efficiency and enjoyment out of your listening equipment. For one thing, shortwave radio engineers follow exacting techniques when scheduling the shortwave bands in which their radio stations operate. Their decisions, which vary from season to season and year to year, are influenced by the behaviour pattern of the ionosphere – which in turn is influenced by the level of sunspot activity, the season of the year, daytime and night propagation conditions, and so on. Therefore, some understanding of these factors may protect you from long hours of frustration. For instance – trying to receive North American or European stations in the 21 Mc/s band at about 2100 GMT during winter months during low sunspot numbers. So – to return to our original question. What IS the ionosphere? Its influence on shortwave radio transmission and reception will, we hope, become clear to you as we proceed with our discussion.

The ionosphere consists of a number of layers of ionized gases enclosing our atmosphere like a shell, or, like a series of mirrors surrounding the earth at various heights. The lowest layer at about 60 miles above the earth (that's approximately 90 km), to the highest at about 280 miles (or 450 km), depending upon the season of the year and the time of day or night. In fact, one could say the ionosphere is a "mirror in the sky". A mirror which reflects radio waves, electro-magnetic waves of certain types, back to earth. Without the ionosphere, long-distance radio communication would be impossible by shortwave.

How does the ionosphere reflect these radio waves back to earth after they have left the shortwave transmitter? To understand this, we must first understand the structure of our ionosphere and the nature of radio waves. In 1901, Marconi succeeded in sending a wireless signal from Cornwall in southwest England to Newfoundland, and in so doing, raised a problem. How was it possible for a radio wave to travel in a straight line BEYOND THE HORIZON and be picked up by a receiving station located *over* the horizon? It was then already known that radio waves must travel in straight lines. Or so it was thought! Furthermore, ground waves would not be able to follow the curve of the earth's surface far enough, to reach that distant receiving antenna in Newfoundland. Then Kennelly in the United States and Heaviside in England suggested, both about the same time, that the air in our outer atmosphere was different to that at ground level. That, in fact, the earth was surrounded by a layer of electrified conducting air or gas which was capable of reflecting radio waves back to earth instead of permitting them to escape into outer space. At THAT time it was only a theory proposed independently by these two scientists and it was not until 1924 that Sir Edward Appleton, the British radio physicist, using the Bournemouth standard-band transmitter of the BBC, experimented and actually proved the physical existence of the Kennelly-Heaviside layer, or the E layer as we now call it. In the years 1924 and 1925, Appleton and his co-workers made many such experiments and found that the structure of the ionospheric region was not as simple as was first believed. For example, they found that the ionosphere was composed of not *one* reflecting layer of ionized gas, but several, lying one above the other. Furthermore, the degree of ionization in these layers was found to vary from hour to hour, day to day, season to season, and even over much longer periods – over years! Since those days, the techniques of ionospheric measurement – or SOUNDING as it is called, have improved considerably. There are now many ionospheric sounding stations located in countries all over the globe. Rocket sounding programs have been in progress for some years and there is the important part played by Canada's "Topside Sounders". These are the artificial satellites Alouette I and Alouette II, constructed by the Defence Research Telecommunications Establishment in Ottawa, and programmed to measure ionospheric densities, critical frequencies and so on, from ABOVE the ionosphere. Both of these Canadian ionospheric sounding satellites have been extremely successful and they have considerably expanded our knowledge of the ionosphere (see photographs).



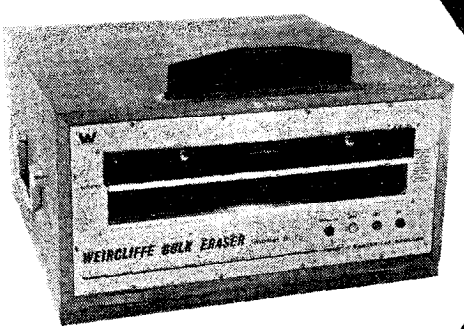
FORMATION AND STRUCTURE OF THE IONOSPHERE

The ionosphere is created by energy radiated by the sun. That is, by solar ultra-violet and X-ray radiation. This is most strikingly evident during an eclipse of the sun when the intervention of the moon blocks off this radiation and prevents it reaching our atmosphere. At such times, density of ionization falls especially in the top-most layer, the F-layer and its ability to reflect the higher fre-

Continued page 48

do you use tape

Weircliffe bulk tape erasers



MODEL 8 (NATO CAT Nº 5835-99-972-5371)

TIME FOR ERASURE ..... 6–10 secs	CAPACITY ..... 100–250 tapes per hr
DEGREE OF ERASE .. better than 80dB below a saturated 1k/c signal	OPERATING VOLTAGE ... 200/240v 50~ or 115v 60~
TAPE/FILM WIDTH ..... ¼"–2" video	CURRENT (INTERMITTANT) 15A
SPOOL SIZES ..... up to 14½" max	DIMENSIONS ..... 21" x 20" x 10½" 52 x 51 x 27 cm
SPOOL TYPE ..... any	
OPERATION TIME ..... unlimited	WEIGHT ..... 92 lbs – 42 kg

Other erasers in the Weircliffe range include:—

MODEL 6 For tape widths of ¼" to 1" instrument and video on spools up to 8¼" diameter.

MODEL 7 For continuous tape cassettes (cartridges) not exceeding 8" square and 1" deep.

MODEL 10 For 26" diameter spools of cine film 35mm-70mm (sound track language redubbing).

MODEL 14 The only commercially available conveyor belt system suitable for continuous operation and having an erase capability of 1200 tapes per hour of all widths up to 2" video on any spool diameter up to 14½". Degree of erase better than 90dB.

THROUGHOUT THE WORLD WEIRCLIFFE ERASERS HAVE THE APPROVAL OF TAPE MANUFACTURERS, BROADCAST AND TV AUTHORITIES, MANUFACTURERS OF INSTRUMENT, DATA AND COMPUTER EQUIPMENT AND CIVIL AND MILITARY GOVERNMENT DEPARTMENTS.

Enquiries to manufacturers

AMOS of EXETER Ltd · EXETER · ENGLAND

Telephone: Exeter 72132
Telegrams: Amos Exeter

Shortwave Radio and the Ionosphere

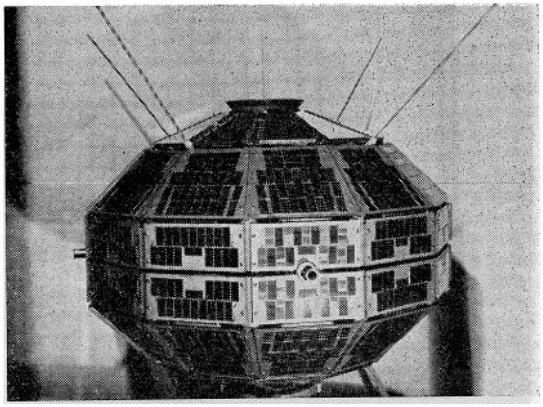
(Continued from page 46)

quencies, the 16 and 19 metre bands is drastically weakened. There are also many variations in the degree of ionization especially of the E and F layers between night and day and between summer and winter. All this evidence indicates that the ionizing agent is indeed radiation emitted by our sun. And if final proof is needed, we have only to watch the behaviour of the international shortwave broadcast bands over a sunspot cycle. During years of high solar activity, the 13 metre band (21 Mc/s) is crowded, and is popular for North Atlantic circuits. But during low sunspot years, very few radio stations can be heard in this band, except perhaps on a few north-south circuits.

The lowest layer, that is the one nearest the earth, is the D layer or, more professionally, the D *region* of the ionosphere. The D region is located about 50 miles (that is 80 or 90 km) above us. It is in the D region that most of the absorption of shortwaves occur. D region ionization is at maximum at local noon and disappears about local sunset and with it – D region absorption. This is why it is possible to hear distant standard-band (medium wave) radio stations after dark and which are not normally audible during daytime. The D layer is not effective in reflecting the higher frequencies back to earth, that is, frequencies above 6–7 Mc/s, and so plays only a minor role in long distance radio communication.

The lowest layer which begins to have a significant part in DXing is the E region, at about 80-90 miles, approximately 150 km above the earth. By the way, in discussing the heights of these regions or layers, we usually indicate the height of the *centre* of each region with the layer spreading out on either side of the height indicated. The E (or Kennelly-Heaviside) region is only significant during daylight hours when it is sufficiently ionized by the sun to reflect shortwaves. It is a region of reasonably high atmospheric density and thus its ionization will vary with the height of the sun, or the angle of the sun with respect to the layer. After sundown, ionization density drops rapidly and the region is no longer able to refract shortwaves. But, as the sun begins to climb above the region's horizon, layer density quickly increases to maximum again, at about local noon. This daily change in regional ionospheric density is called the "Diurnal variation" and it applies to a certain extent to the other ionospheric regions.

The highest layer of ionized gases is the F region, or Appleton layer, after the famous radio scientist Sir Edward Appleton who discovered it. The structure of this region is quite complex and, in fact, at times splits into two layers called the F1 and the F2. The F region is the most important for long-distance radio communication. It is the most intensely ionized of the layers and its height, between 180 and 280 miles (300 and 450 km) varies with the time of day, season of the year and solar activity. Ionization normally reaches a maximum shortly after noon local time and thereafter begins to decrease slowly to a minimum just before local sunrise. Immediately after sunrise, ionization density increases rapidly until maximum is reached once again soon after local mid-day. During winter and summer daytime, the F region divides into two distinct layers but this division is much more pronounced during summer daytime than it is in the winter months. During the summer season, the F1 is centered around the 200 km level (about 130 miles) while the F2 maximum ionization is at 450 km (or 280 miles). During winter daytime however, this separation is very much reduced with the F1 at 200 km (130 miles) and the F2 at 300 km (or 190 miles). Thus less than 100 km separates the F1 and F2 during winter daytime, whereas in summer this separation increases to approximately 240 km. During the hours of darkness in winter and summer, the F region remains as one layer centered at about 350 km, or 220 miles. So you can see that the structure and behaviour of the F region is really quite complicated. Incidentically, you may be interested to know that it was Sir Edward Appleton who initiated the system of using letters to designate the various regions of our ionosphere. Starting with the letter F (for the F region) in 1925 because, he said, this will still leave several letters available for allocation to other layers which might be discovered above or below the three already named, the D, E, and F regions. However, to this day there have been no further discoveries and it has not been necessary to use any more letters.



IONIZATION PROCESS

The next step in our study of the ionosphere is to determine what the term "ionization" means? How are these layers of gases ionized? We already know the ionizing agent. Solar emission of ultra-violet and soft X-rays. But what causes these layers of gases in our outer atmosphere to become electrically conducting so that they can reflect radio waves? Gases, like all material or matter, are composed of atoms. And, in turn, atoms are composed of a positively charged nucleus around which revolve electrons which carry a negative charge. The whole being in a state of balance, or to put it scientifically, in a state of hostile symbiosis! Now, the wavelength of the solar radiation, the ultraviolet or X-ray radiation, is so short that an interaction can occur between it and the atomic structure, the atom. A tremendous force is exerted on the atom. So much so in fact, that it dislodges or splits off an electron. Such a dislodged electron is called a "free" electron and it now exists as a separate negatively charged particle. The atom which has lost the electron is no longer neutral but now has a positive charge and is called an "ion". Hence the term "ionization". Thus if we remember that an essential feature of an insulator is that its electrons are immovable within their parent atoms, i.e they cannot be dislodged, then a gas which has been ionized possesses the property of an electrical conductor. There is a flow of electrons, therefore a flow of elec-

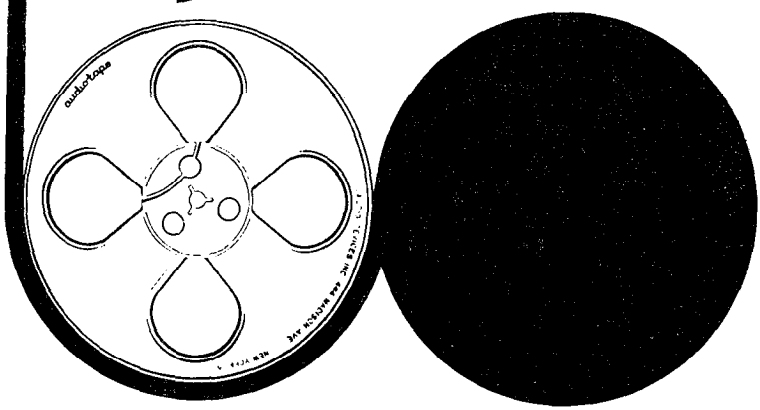
Continued page 50

audiotape

TRADE MARK

STANDARD RECORDING ON PLASTIC BASE

New! HIGH-PERFORMANCE FORMULA



High Performance Audiotape is today's most remarkable recording tape. **Audiotape** has a new formula unmatched by any other magnetic tape.

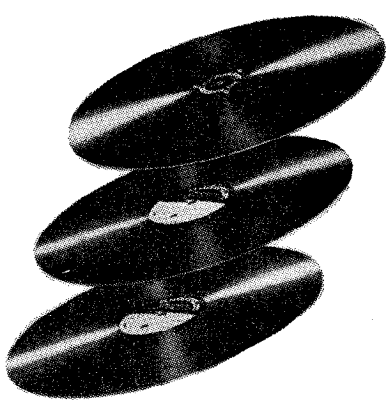
- Greater Uniformity
- Greater Sensibility
- Greater Durability
- Greater Clarity

Professional people involved in duplicating, studio work and broadcasting have found the **new formula** really superior. Try a reel!

audiodiscs

TRADE MARK

A standard of quality and uniformity in every field of disc recording especially suitable for professional sound studios.



Master **Audiodiscs** exceed requirements for quality professional recordings. Double sided — 8", 10", 12" and 16" sizes: single face — 12" and 16".

AUDIO DEVICES, Inc.

Export Department:
13 East 40th Street, New York, New York, 10016, U.S.A.
CABLES: ARLAB

Shortwave Radio and the Ionosphere

(Continued from page 48)

tricity. Remember those "free" electrons. And so when the ionospheric regions are ionized, a flow of free electrons is in process and the whole region acts upon radio waves as if it were a conductor or an electrical "reflector". Actually, "refractor" is the better term. Ionospheric density is not uniform throughout each region. There are clouds, ledges, ridges and sporadic formations of ionization at different levels. Nor does ionization density vary uniformly with the latitude or height of each region or layer. The density of ionization is maximum at the centre of each region and gradually thins out towards the upper and lower limits of the region. And so gradually region merges into region. Thus, even in space there is no *real* vacuum.

SKYWAVE REFRACTION

A radiowave is an electro-magnetic wave travelling at the speed of light, i.e. 300,000 kilometres, or 186,000 miles per second. Its shortwave frequency can be anywhere between 3 and 30 Mc/s, determined by the frequency to which the transmitter is tuned. The degree by which a radio wave is refracted or "bent" by the ionosphere depends upon two important factors. These are, the density of ionization present in the layer at that particular time, and the frequency or wavelength of the radio wave. Thus, if the ionization is *dense* enough and the frequency *low* enough, a radio wave entering the layer *vertically* will be refracted back to earth. This is a remarkable demonstration of the ability of the ionosphere to reflect electro-magnetic waves. It is exactly this technique which is used by ionospheric sounders to determine the height and density of the various regions. These soundings are made at certain times each day in many areas of the world. But if the frequency is *too* high and the layer density *too* low, the radio wave will penetrate the layer and proceed on into outer space and of course be lost to any ground-based receiver. It is in between these two extremes that ionospheric refraction of shortwave radio signals takes place. The condition we have just considered is typical of the way skywaves are refracted by a single region. But when several layers are involved, e.g., the E and F1 layers, the radio wave's path is much more complex. It is even possible for a signal to be "trapped" between layers and so lost to a ground-based receiver.

SUNSPOT ACTIVITY

A long-distance radio signal "skips" or "hops" between the ionospheric layer and the earth's surface during its passage from transmitter to receiver. At least that is what happens under normal ionospheric conditions. But unhappily the ionosphere is not always quiet and well-behaved. As we have just seen, it contains ridges, ledges, columns and clouds of ionization of various densities, which scatter radio waves just as a splintered mirror will scatter light. Also there are ionospheric storms and disturbances, some of which are caused by eruptions in the sun or those infamous sunspots – which are worth a book to themselves, for they are *really* fascinating. There is the aurora which is usually indicative of a disturbed sun and ionosphere and there are SID's – or Dellinger fade-outs, geomagnetic disturbances of the earth's magnetic field and the complicated relationship between the Van Allen belts of radiation and our ionosphere. But let us concentrate on sunspots for a moment and their effect on shortwave radio and the ionosphere. Many of you will have read or heard about the eleven-year sunspot cycle, so-called because of the eleven-year period between the maximum phases of sunspot activity. Actually, it isn't exactly eleven years from maximum to maximum (or minimum to minimum) but near enough. Maximum phase means of course that the sun's face is at its spottiest and minimum phase means that period of the cycle when the sun is least spotty. And like a human face, spottiness is an indication of disturbed health! You may be interested to know that the recent maximum phase which reached its peak in the late summer of 1958 was the highest ever recorded since sunspot cycle records were first started in, I believe, 1749. We can expect the next sunspot maximum during 1968 and present indications point to a maximum even higher than the record high of 1958. The last minimum was in July 1964 when the observed sunspots count went down to 3.4. Since we know that ionization of our upper atmosphere is due to solar radiation, the general result of more sunspot activity is an increase in ionization thus increasing critical frequencies – the highest frequency transmitted vertically by an ionospheric sounder but still refracted by the ionosphere. Higher critical frequencies mean higher maximum usable frequencies and *this* means increased use of the higher international shortwave broadcasting bands such as 13 and 16 metres. Conversely, when sunspot activity is *low*, or at minimum phase as during the summer of 1964, ionization decreases and this means lower critical frequencies, low maximum usable frequencies and *this* means increased usage of the lower frequency bands, i.e. 31, 41 and 49 metres. Anyone who has listened to these bands during minimum phase knows that means increased congestion, overcrowding, insufficient frequency separation between stations and greatly increased interference. So far so good. But, what *is* a sunspot? What causes them? Well, although they are among the most thoroughly observed and studied astronomical phenomena, the mechanism of their formation still remains very much a mystery. Many theories have been advanced from many parts of the world but none of them have so far found universal acceptance. They could perhaps be likened to great storms, cyclones in fact on the face of the sun. They appear darker than the surrounding surface of the sun, the photosphere, because they are cooler, that is lower in temperature by some thousands of degrees. So their appearance is actually a matter of contrast. Sunspot sizes can and do vary enormously and some are larger then the surface of our own earth. The largest so far recorded was observed on April 7, 1947 and its area exceeded 7,000 million square miles. Under a "quiet" sun, the ionosphere undergoes a number of regular normal variations; geographical, seasonal, diurnal and with the progress of the sunspot cycle. These are normal variations. But what happens when the sun is disturbed? Which is more likely to happen when sunspots are numerous.

RADIO BLACKOUTS

Solar activity, such as flares, causes extra radiation to be emitted by the sun. Bursts of radiation which cause abrupt changes in certain areas of the ionosphere. A disturbed ionosphere means radio waves are not refracted smoothly or perhaps not reflected back to earth at all. This may lead to a complete failure of long-distance radio communication. A "black-out" in fact. These solar disturbances are of two distinct types the most dramatic being the SID (Sudden Ionospheric Disturbance) or "Dellinger fade-out", named after the late Dr. J. H. Dellinger

(Continued page 52)

BROWN BOVERI POWER TUBES 1967

Ask for full documentation

Super Power Triode
Type BTW 150–2
Output Power 600 kW
Max. Frequency 30 Mc/s

BROWN, BOVERI & CO., LTD., BADEN, SWITZERLAND

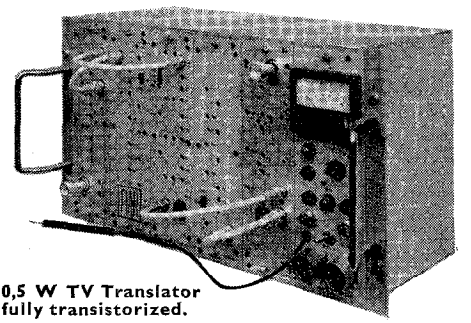
Representatives all over the world.

FIAR

FABBRICA ITALIANA APPARECCHI RADIO

Via G. B. Grassi, 93 - MILANO - Telefono 306.241 - 306.841 - Telex 31295

PROFESSIONAL ELECTRONIC DEPARTMENT



0,5 W TV Translator
fully transistorized.

- This "fully transistorized equipment" uses arack of 19" and allows the conversion of television channels according to CCIR standard.
- Conversion possibility:
  Band I/Band III: Band III/Band I: Band III/Band III.
- Output power: 250mW peak video.
- Threshold sensibility: 3,5 μV.
- Power supply: from mains 220/110V$_{CA}$ – 30% + 20% 50 ... 60 Hz: consumption 71 VA; from battery 48 V – 20% + 30% consumption about 42 W.
- Size: Width 482mm, height 261mm, depth 255mm.

- The repeater P 3149 can be supplied with an electronic tubes amplifier for power supply from mains 220/110 ±2%, 50 ... 60 Hz, by means of which in the executions P 152 and P 153 it is possible to increase the output power respectively to 1 W and 5 W peak video.

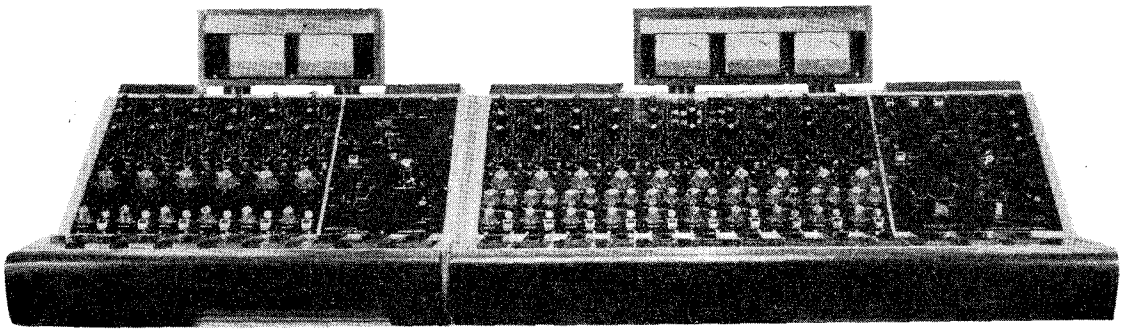
Shortwave Radio and the Ionosphere

(Continued from page 50)

of the United States National Bureau of Standards who first observed it in 1935. These sudden radio fade-outs are now conclusively linked to solar flares. Their effect on shortwave radio reception is most impressive. Everything appears to go dead even background noise disappears. The resulting blackout may last for a few minutes or a few hours. Although the whole skywave portion of the radio spectrum may be affected, usually it is the lower frequencies which are most affected with long-distance communication sometimes possible above 25 Mc/s. Intense ionizing radiation from the solar flare penetrates the normal ionospheric layers to greatly intensify ionization at the 70 to 90 km level, the D region. With this appreciable increase in D layer ionization, absorption of skywave signals is increased to the point where no electro-magnetic energy remains to be refracted by the E or F regions. But frequencies above approximately 25 Mc/s are sometimes able to penetrate this temporarily heavily ionized D region for reflection by one of the higher layers. So much for the "Dellinger" or radio fade-out. The other type of radio disturbance is the Ionospheric Storm, not so swift in its sudden onset or so dramatic in its effect as the SID but a "communications killer" none the less. The ionospheric storm constitutes the major type of disturbance to shortwave radio communication and its effects can be much more prolonged, sometimes for days at a time. Even trans-Atlantic telephone and telegraph cables have been seriously affected. Now, while the SID is usually confined to the sunlit side of the earth, the ionospheric storm can happen at anytime during day or night. The general symptoms are, lower signal strengths and an increased rate of fading – perhaps leading to complete radio blackout. Usually the higher frequencies are affected first and as the disturbance deepens, all normally usuable frequency bands become unusable. Recovery is gradual and the circuits most affected are those passing through the auroral zones. During this type of storm, the F layer ascends to an abnormally great height and becomes very unstable and even totally disrupted. The ionospheric storm is associated with the emission of solar corpuscles. The arrival of the solar corpuscular steam in our ionosphere causes the storm. In spite of extensive study over the years, we have as yet, no reasonable theory to explain the sudden increase in D region ionization – as in the SID, or, the sudden increase in height of the F layer – as with the ionospheric storm. But, here we should pause a moment. We must be sure to differentiate between the *beneficial* effects of a slow, general increase in sunspot activity which improves shortwave propagation conditions and the drastic effects of the various types of solar disturbances, flares, sudden increases in sunspot activity and so on, which seriously impair radio communications.

In this article we have done no more than skim over the surface of a highly complex and very technical subject. Many physicists and shortwave radio engineers spend their lives in investigating only one or two aspects of the various matters we have considered here. The more we find out about our outer atmosphere, the more complicated its structure seems to be. When Alphonse the Wise heard the Ptolemaic system of the Universe explained, he said "if the Lord Almighty had consulted me before embarking on the Creation, I would have recommended something simpler". I think we would all be inclined to agree with him!

a transportable 16 channel sound mixing console built on the modular principle



designed and built exclusively for a leading London recording studio to meet the most exacting requirements of high quality music recording, using solid state techniques.

typical specification extracts.

number of channels	16 or more with extensive frequency correction.
outputs	3 or 4 track with reduction to 2 track stereo or mono. 3 group reduction monitoring. 3 foldback. P.A. and echo send groups.
frequency response	20 to 20,000 cps ± 0·5 dB.
distortion	less than 0·01% at 0 dBm into 600 ohms. 0·03% at +10 dBm into 600 ohms. 0·1% at +20 dBm into 600 ohms.
noise	less than −128 dBm equivalent input signal referred to 600 ohms.
gain	−80 to 0 dBm in 10 dB steps.
input impedance	3·75 to 100,000 ohms (plug-in transformers).

NEVE

Rupert Neve & Company

33 Church Street, Little Shelford, Cambridge, England.
Telephone Shelford 3537 (STD OCA 04)

AERIALS - THE WHY AND WHEREFORE

by Jim Vastenhoud.

Jim Vastenhoud

Improving shortwave reception is the wish of many listeners, but not all realize that this is invariably connected with the suspension of a good aerial. This being so, some information on aerials seems to be called for. The problem of aerials can play an important role in places where the possibilities for aerial construction are limited and the most favourable alternative must be found. In this article we hope to give you an insight into aerials and aerial construction. We can only deal with a few types, which one might call the most popular outside, window-sill and indoor aerials, in the hope that you will want to do some experimenting in order to improve the reception of your set by taking all the signal available and paying the necessary attention to correct matching between the aerial and the radio.

Basically, an aerial is a so-called open resonance circuit: the extensiveness of capacities and inductances makes it suitable for radiating or receiving electro-magnetic waves. For shortwave long distance reception especially the electrical component of these waves is important as the magnetic component dies out rather quickly. For medium wave (SB) reception however, it is the magnetic field which induces signals in the aerial, and that's why the application of built-in ferrite types has taken such a flight. Aerials designed for receiving the electrical component of the radiated signal are so-called capacitive aerials. Examples are the horizontal and vertical wire, the whip, the dipole, the ground plane and variations of these. Concentrating on the horizontal wire or to the inverted "L" aerial, we can mention some properties which influence its performance:

proper insulation
height
length
material used
radiation resistance
matching to the receiver
presence of local interference sources

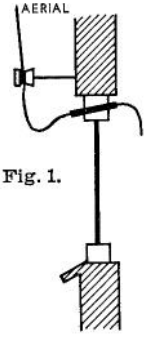


Fig. 1.

Outside insulation is mainly by pyrex glass or glazed porcelain insulators. The most commonly known is perhaps the "egg"-type, of which more than one is generally used because high frequency losses occur over dirty or wet insulators and when we extend the length of the insulating material, loss will consequently be smaller.

As the aerial is outside and the receiver inside, a lead-in must somehow be made. Usually, the wooden window-frame is the favourite spot for this. Drill a small hole in it and stick the sleeve of an old ballpoint-pen through it, so that it can serve to feed the aerial wire through. To prevent water from penetrating into the room, arrange this as indicated in figure 1.

Keep the length of wire inside as short as possible, and insulate it. If a piece of insulated wire is connected to the aerial coming in, clean both sides thoroughly over a few inches. The joint should preferably be soldered, or otherwise properly connected and insulated with insulation tape (to prevent oxydation).

The height of an aerial is important, but it is also necessary to suspend it as free as possible from (conducting) obstacles and overhead power lines. To fulfil this condition one will often want to make use of trees. To keep the wire straight in this case, we recommend the use of a pulley and counterweight, as illustrated in figure 2. The final insulator of the aerial should be kept outside the branches a couple of feet to allow for annual growth.

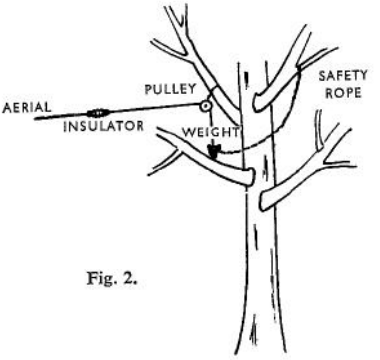


Fig. 2.

The length is not unlimited, but depends on local conditions. Generally speaking, any length between 20 and 85 feet will do. If it is made too long, however – more than three times the highest waveband tuned to – it assumes clearly directive properties. In the case of the 21 MHz band (13 metres), the aerial should not exceed 95 feet. For the purpose of matching, the greater the length the better.

The aerial should be made of weather-resistant material. Good conductivity metals are to be preferred: hard-drawn copper wire, twisted copper wire or copper-clad steel wire are favourites. The use of plastic or rubber insulated wire is allowed. The mechanical strength must be sufficient to withstand not only its own weight but also high winds.

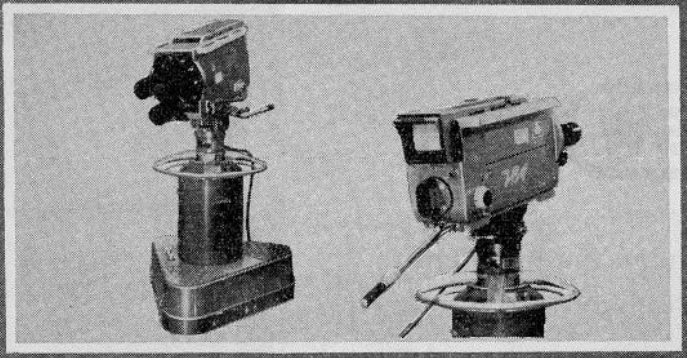
Radiation resistance is an imaginary resistance, in which as much energy is dissipated as radiated in reality. In other words, a high radiation resistance indicated a high aerial efficiency. The radiation resistance of a horizontal half wave aerial*) is 73 ohms, but increases when we make it longer. All types of aerial have their own characteristic radiation resistance.

The aerial should be matched to the receiver with wire of the proper characteristics. This plays an important role in the case of tuned aerials, or where it is necessary to use shielded wire, e. g. when

*) The actual length of a "half-wave" aerial is about 10% less than half the wavelength tuned to.

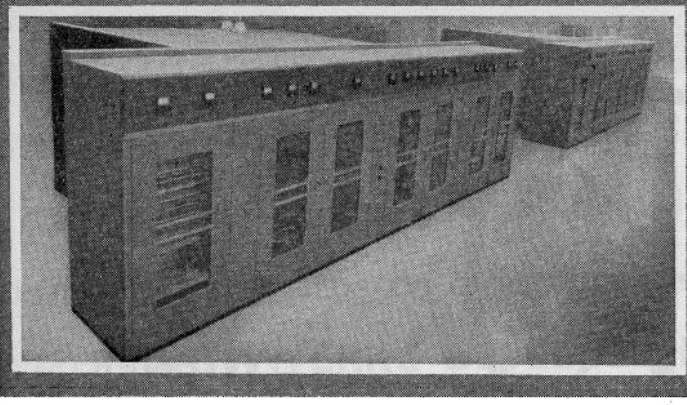
(Continued page 59)

TOSHIBA BROADCASTING EQUIPMENT –
top choice for top quality



The IK-44, Toshiba's latest development in monochrome TV cameras, features a pick-up tube only 4.5 inches in diameter. Full transistorization reduces size, weight and power consumption. What's more, the IK-44 can be used with **both** U.S. and European systems!

Although portable, this 11GC band TV relay equipment works as well as the fixed type, and has been designed for standard color TV systems. Specialy developed for wide band transmission, the klystron tube (11V 54A) performs excellently at high power output.



For over 35 years, Toshiba has been one of Japan's leading producers of transmission epuipment. Toshiba pioneered in the use of all-metal rectifiers, and full air-cooling of tubes in equipment up to 100 kW output. Shown here is a portion of the 300 kW equipment for the NHK broadcasting station at Hatogaya.

Tokyo Shibaura Electric Co., Ltd.
Tokyo, Japan
Producer Goods Export Division, Uchisaiwaicho, Tokyo

Toshiba
QUALITY SINCE 1875

WSW

Studioeinrichtungen für Rundfunk, Fernsehen und Aufnahme

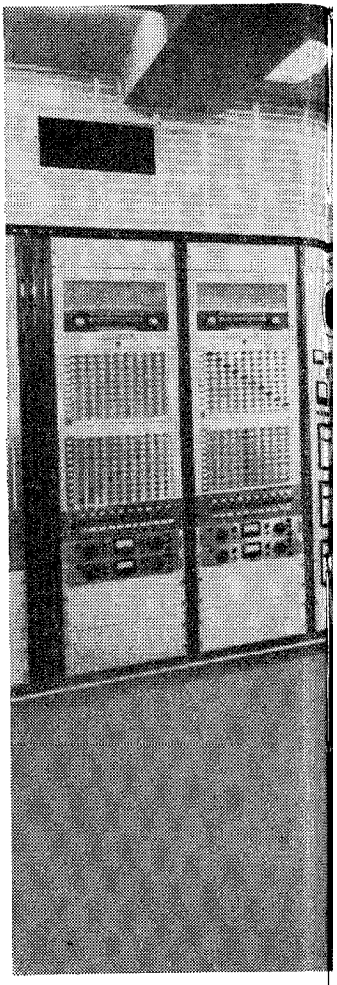
Studio installations for broadcasting, television and recording

Installaciones de estudios para radio, televisión y grabación

Zentrale Hauptregie
für den Ungarischen Rundfunk

Central master control
of Magyar Radio

Dirección artistica central
para la Radiodifusión Húngara



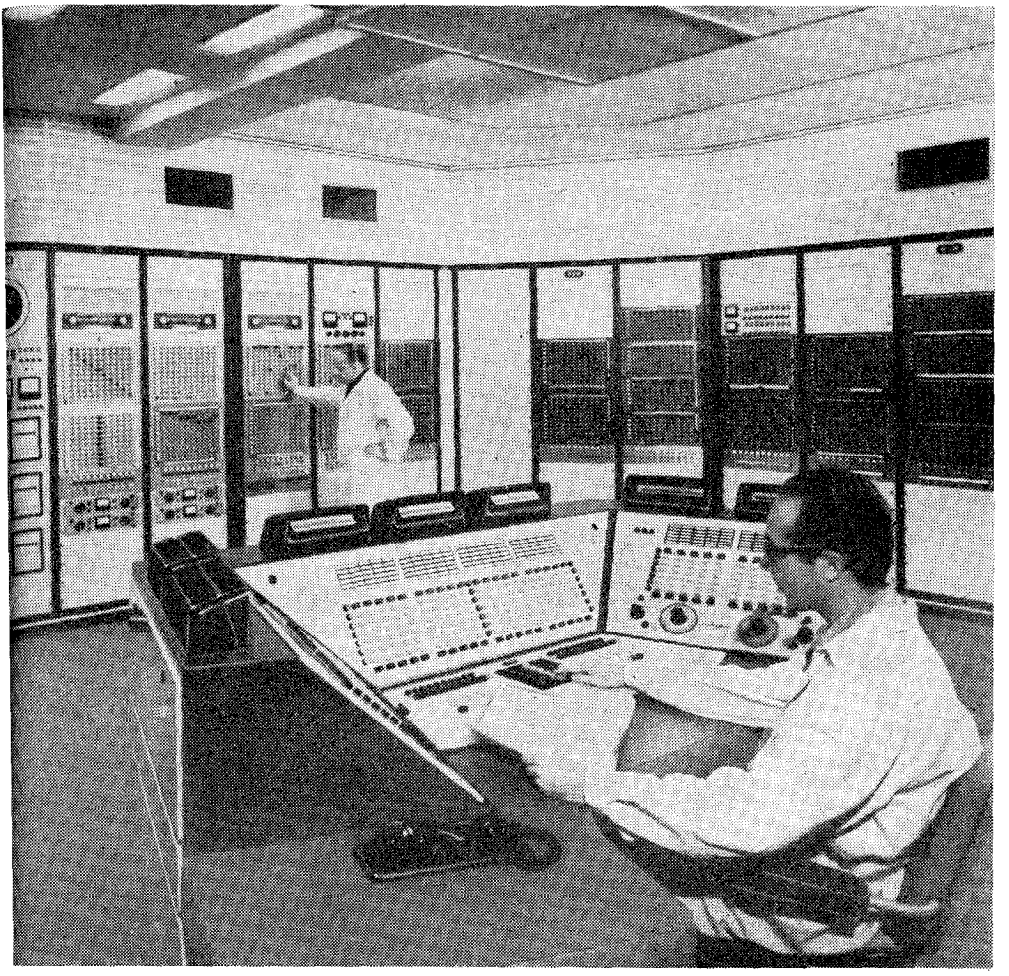
Die moderne

The modern el

La electrotecni

WIENER SCH

GENERALVERTRETUNG



ektronik braucht zuverlässige Bauelemente.

tro-technics need despendable building elements

necesita elementos de construcción de confianza

ACHSTROMWERKE GESELLSCHAFT M. B. H.

ÖSTERREICH (DER SIEMENS AG IM BEREICH SCHWACHSTROMTECHNIK)

FOR MAXIMUM RELIABILITY

Sintronic

AM & FM TRANSMITTERS

- Trouble-free Performance
- Simplest Design
- Latest Concepts
- Easy Maintenance

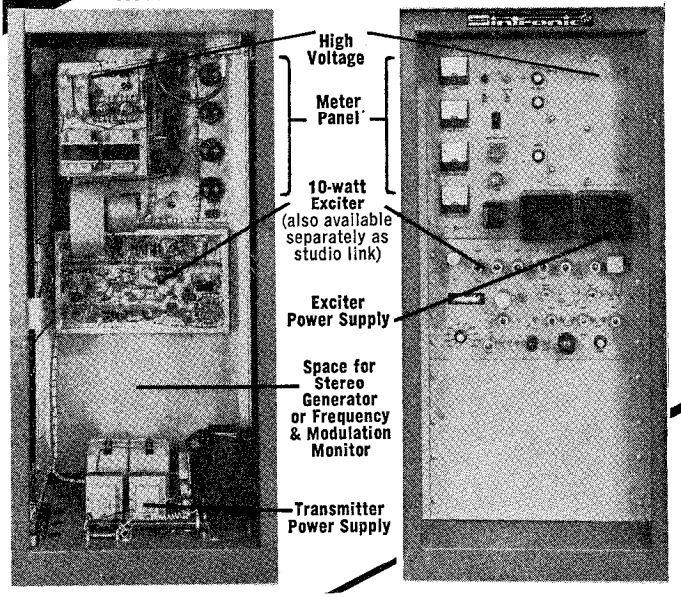
MODEL NO. FM 250A
250-WATT
FM BROADCAST TRANSMITTER

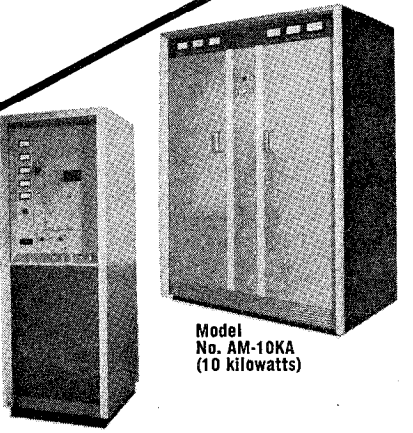
Only 23" wide, 26" deep and 48" high.

- MEETS FCC SPECIFICATIONS
- COLOR CODED WIRING
- DESIGNED FOR STEREO AND MULTIPLEX
- SILICON RECTIFIERS
- DESIGNED FOR REMOTE CONTROL
- PRE-TUNED TO CUSTOMER'S FREQUENCY
- NO NEUTRALIZATION REQUIRED
- SEPARATE TEST UNIT FOR ALL EXCITER FUNCTIONS
- MAXIMUM ACCESSIBILITY — WITHOUT SPECIAL TOOLS

Rear view

Front view

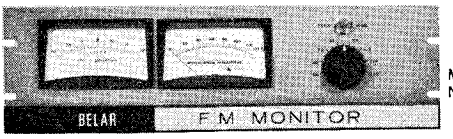

High Voltage
Meter Panel
10-watt Exciter (also available separately as studio link)
Exciter Power Supply
Space for Stereo Generator or Frequency & Modulation Monitor
Transmitter Power Supply



Model No. AM-10KA (10 kilowatts)

Model No. AM-1KA (1 kilowatt)

FM FREQUENCY AND MODULATION MONITOR
in only 5¼" of rack space!
. . . fits inside Sintronic FM Transmitters



MODEL NO. FMM-1

Completely transistorized. Monitors *both* carrier frequency deviation *and* total modulation. Engineered for minimum distortion and cross talk, simplicity of operation and long, stable, trouble-free performance. Saves the broadcaster 35% as compared to the cost of separate monitors.

COMPLETE LINE OF SINTRONIC-QUALITY AM TRANSMITTERS
From 100 watts to 50 kilowatts

Write Dept. WRT for complete information.

BROADCASTING DIVISION
Singer Products Company, Inc.
95 BROAD STREET, NEW YORK 4, N.Y. Cable: EXREGNIS

Aerials - the why and wherefore

(Continued from page 54)

electrical interference is present. In the above-mentioned case, the shielded wire should be 75 ohms coaxial cable, the "characteristic impedance" of which is as close to the radiation resistance of the aerial as possible. The screening braid is grounded and the aerial connected to the centre wire. It must be stressed that the shielded part of the aerial does not catch signals at all, also preventing the spark interference to penetrate to the receiver. Under normal conditions, the use of coaxial cable is not recommended, because of its capacity.

With horizontal aerials, matching is not considered a problem. With vertical aerials – including the inverted L type – it is however an important consideration, because a bad match leads to loss in signal strength. The ratio between the length of a vertical aerial, such as a whip or rod aerial, and the wavelength of the station tuned to, determines the radiation resistance of the aerial. A quarter wavelength whip has 36 ohms, a half wavelength whip 105 ohms, which is much more favourable. However, we will not always be able to construct a half-wave length aerial, particularly if it has to be mounted on a window-frame. Recalling that the aerial is an open resonance circuit, it means that adding inductance or capacitance artificially will change its properties. To cut a long story short: adding a coil will increase its "length" (electrically speaking) and connecting a condenser in series with it will shorten it. The condenser, value appx. 200–400 uuF, is applied when the physical length of an aerial is too large. More important for city dwellers is the so called loading coil (fig. 3) which can make up for a too short whip as far as matching is concerned.

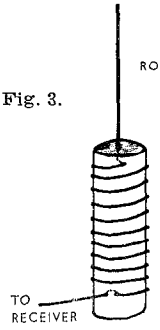


Fig. 3.

A typical loading coil (base loading) is wound on a 1¾–2 inch (4–5 cm) diameter plastic form and consists of 5 windings for the high frequency shortwave bands and up to 18 windings for the low frequency shortwave bands. The wire used in spatial windings is 1.3 mm (AWG 16 resp. SWG 18). Of course you need some experimenting to find the proper matching, but that's just what we want to encourage. Furthermore, it can be said that the shorter the aerial, the more attention should be paid to proper matching, good insulation and the like, because the "signal catching capabilities" are small due to the limited length.

To prevent static and to add the necessary top capacity, a metal ball or disk must be connected at the top of the rod.

Diagrams of matching units (filters) can be found in books on the subject, and are issued by some shortwave stations (Radio Nederland: aerial filter).

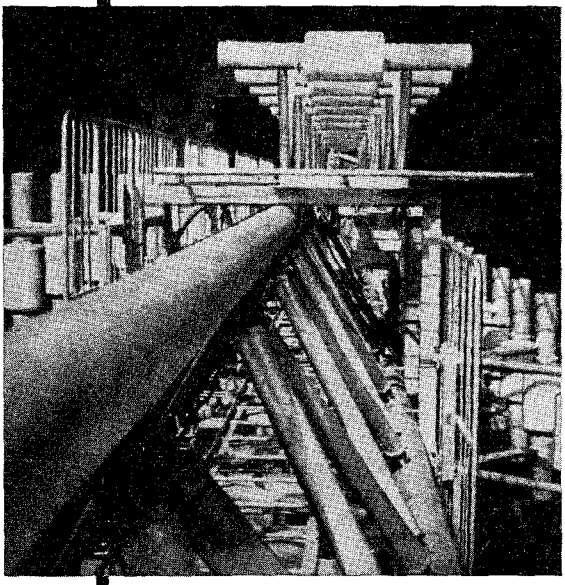
Indoor aerials should be avoided as much as possible, but sometimes there is no alternative. Remember that shortwave signals cannot penetrate metal roofs and reinforced concrete structures. Erect the aerial as high as possible and preferably alongside one or more windows, where signals can penetrate. Try some different positions to find the one which gives the best results with the radio tuned to a weak shortwave station.

Earthing is another important factor. In all aerial

(Continued page 60)

KATHREIN

Antenna Systems for Television-Stations



KATHREIN-antennas are rigid steel constructions, hot dip galvanized and ice-protected, with high performance.

The right antenna for hard weather conditions

A. KATHREIN · ROSENHEIM · W.GERMANY

Älteste Spezialfabrik für Antennen und Blitzschutzapparate

TABLE OF THE MOST SUITABLE MEGACYCLE BANDS, 1967

Prepared by Roger Legge, Etlan, Virginia, U.S.A.

THE LISTENER'S AREA	LOCAL TIME	APPROX. GMT TIME	LOCATION OF TRANSMITTING STATION																			
			Jan./Febr., Nov./Dec. 1967							Mar./Apr., Sept./Oct. 1967							May–August 1967					
			Eu/No.Af.	N.Am.(E)	N.Am.(W)	C./So.Am.	C./So.Af.	ME/So.As.	Ea.As.	Aus./NZ.	Eu/No.Af.	N.Am.(E)	N.Am.(W)	C./So.Am.	C./So.Af.	ME/So.As.	Ea.As.	Aus./NZ.	Eu/No.Af.	N.Am.(E)	N.Am.(W)	C./So.Am.	C./So.Af.	ME/So.As.	Ea.As.	Aus./NZ.
EUROPE AND NORTH AFRICA	00.00–04.00	23.00–03.00	6	6	9	4	9	9	9	9	6	6	9	11	9	9	9	9	9	11	11	9	9	11	11	11
	04.00–08.00	03.00–07.00	6	6	9	6	9	7	9	9	6	6	9	11	9	7	9	9	9	11	11	11	9	11	11	9
	08.00–12.00	07.00–11.00	11	–	9	9	15	15	15	9	11	9	9	11	17	15	15	11	11	15	11	11	17	17	15	17
	12.00–16.00	11.00–15.00	11	15	9	15	15	15	15	15	11	15	11	15	21	15	15	15	11	15	11	15	17	15	15	15
	16.00–20.00	15.00–19.00	11	15	–	15	15	15	9	9	11	15	–	15	21	15	9	9	11	15	–	15	17	15	9	9
	20.00–24.00	19.00–23.00	6	11	–	11	11	7	9	9	9	15	15	15	11	9	9	9	9	15	15	15	15	9	9	9
NORTH AMERICA (EAST)	10PM– 2AM	03.00–07.00	6	6	9	4	7	9	11	11	9	6	11	6	9	9	11	11	9	9	9	6	9	9	11	15
	2AM– 6AM	07.00–11.00	9	–	9	9	9	9	9	9	9	–	9	6	9	9	11	11	11	–	9	9	11	11	11	11
	6AM–10AM	11.00–15.00	15	15	9	9	15	15	9	9	15	15	9	9	17	15	11	9	15	15	9	11	15	15	11	9
	10AM– 2PM	15.00–19.00	15	15	–	15	21	15	–	–	15	15	–	15	21	15	–	–	15	15	–	15	17	15	–	–
	2PM– 6PM	19.00–23.00	11	11	15	15	11	15	–	–	15	11	15	15	15	15	–	–	15	15	15	15	15	11	–	–
	6PM–10PM	23.00–03.00	6	6	11	4	9	6	15	15	9	6	17	4	9	9	17	17	11	9	15	6	11	11	17	17
NORTH AMERICA (WEST)	12– 4AM	08.00–12.00	6	6	6	6	11	9	9	11	9	9	6	6	11	9	9	11	9	9	6	6	11	9	9	11
	4AM– 8AM	12.00–16.00	11	19	6	6	11	11	9	11	11	11	6	9	15	11	9	11	11	11	6	11	11	11	11	11
	8AM–12N	16.00–20.00	15	15	–	15	17	15	9	11	15	15	–	15	17	15	11	11	15	15	–	15	15	15	15	11
	12N– 4PM	20.00–24.00	11	15	15	15	15	15	15	17	11	15	15	15	15	15	15	17	15	15	15	15	15	15	15	17
	4PM– 8PM	00.00–04.00	9	9	15	11	11	15	17	17	9	15	15	11	11	15	17	17	11	15	15	11	11	15	15	17
	8PM–12Mdt	04.00–08.00	6	9	9	6	9	11	15	15	9	9	9	6	9	11	15	15	11	9	11	6	9	11	15	15
CENTRAL AND SOUTH AMERICA	00.00–04.00	04.00–08.00	9	9	9	4	9	9	11	15	9	9	11	6	9	9	11	15	11	9	11	6	9	11	11	15
	04.00–08.00	08.00–12.00	9	9	6	9	9	11	9	11	9	9	9	9	9	11	11	11	11	9	9	9	9	11	11	11
	08.00–12.00	12.00–16.00	15	15	11	11	11	15	11	11	15	15	11	11	11	15	11	11	15	15	11	11	11	15	11	11
	12.00–16.00	16.00–20.00	17	17	–	15	15	15	11	11	17	15	–	15	15	15	15	11	17	15	–	15	15	15	15	11
	16.00–20.00	20.00–24.00	15	15	17	15	11	15	15	17	15	15	17	15	11	15	15	17	15	15	17	11	11	15	15	17
	20.00–24.00	00.00–04.00	9	9	15	4	11	11	15	17	9	11	15	4	11	11	15	17	11	15	15	6	11	15	15	17
CENTRAL AND SOUTH AFRICA	00.00–04.00	22.00–02.00	9	9	15	11	7	9	11	15	9	11	15	11	7	9	11	15	11	15	15	11	7	11	11	15
	04.00–08.00	02.00–06.00	6	9	9	9	9	11	11	17	9	9	9	9	9	11	11	17	11	9	15	9	9	11	11	17
	08.00–12.00	06.00–10.00	15	–	11	11	11	15	15	15	15	–	11	11	11	15	15	15	15	–	11	11	11	15	15	15
	12.00–16.00	10.00–14.00	17	15	11	11	11	15	15	11	17	15	11	11	11	15	15	11	17	15	11	11	11	15	15	17
	16.00–20.00	14.00–18.00	21	21	15	15	11	15	15	9	17	17	15	15	11	15	15	9	17	17	15	15	11	15	15	9
	20.00–24.00	18.00–22.00	11	11	–	15	11	11	11	15	11	17	–	15	11	11	15	15	15	17	–	15	11	15	15	15
MIDDLE EAST AND SOUTH ASIA	00.00–04.00	21.00–01.00	9	9	15	11	11	9	9	11	11	11	15	11	11	9	9	11	11	15	15	15	11	9	11	15
	04.00–08.00	01.00–05.00	7	6	9	11	9	9	17	15	9	9	15	11	9	9	17	15	11	11	15	11	11	9	17	15
	08.00–12.00	05.00–09.00	9	11	11	11	15	11	17	15	15	9	11	11	15	11	17	15	15	9	11	11	15	11	17	15
	12.00–16.00	09.00–13.00	17	9	9	11	15	15	15	11	17	11	9	11	15	15	15	11	17	11	9	11	15	15	15	11
	16.00–20.00	13.00–17.00	17	17	11	15	11	11	11	9	17	15	11	15	11	11	11	9	17	15	11	15	15	11	11	9
	20.00–24.00	17.00–21.00	9	15	–	15	11	9	11	9	15	15	–	15	11	9	11	9	15	15	–	15	11	11	11	9
EAST ASIA	00.00–04.00	16.00–20.00	9	11	–	9	9	9	6	11	11	15	–	11	9	9	11	11	15	15	–	15	11	11	11	11
	04.00–08.00	20.00–00.00	9	11	15	11	11	11	7	15	11	15	15	15	11	11	9	15	11	15	15	15	11	11	11	15
	08.00–12.00	00.00–04.00	9	15	17	15	15	15	15	17	11	15	17	15	11	15	15	17	11	15	15	15	11	15	15	17
	12.00–16.00	04.00–08.00	11	9	11	11	15	17	15	17	11	11	15	11	15	17	15	17	15	11	15	11	15	17	15	17
	16.00–20.00	08.00–12.00	17	9	9	11	15	17	11	11	17	9	11	11	15	17	15	11	17	9	11	11	15	17	15	11
	20.00–24.00	12.00–16.00	17	15	9	15	15	15	9	9	17	15	9	15	15	15	9	9	17	15	9	15	15	15	9	9
AUSTRALIA AND NEW ZEALAND	00.00–04.00	14.00–18.00	15	15	9	11	11	9	11	9	15	15	9	11	11	9	11	9	15	15	11	11	11	9	11	6
	04.00–08.00	18.00–20.00	7	15	–	11	11	9	11	9	7	15	–	11	11	9	11	9	11	15	–	11	11	11	11	9
	08.00–12.00	22.00–02.00	15	15	21	15	11	15	15	9	15	17	21	15	11	15	15	9	15	17	17	15	11	15	15	9
	12.00–16.00	02.00–06.00	11	11	15	11	15	15	15	11	11	15	15	15	15	15	15	11	11	15	15	15	15	15	15	11
	16.00–20.00	06.00–10.00	9	–	11	15	15	15	15	11	9	–	11	15	15	15	15	11	15	–	11	15	15	15	15	11
	20.00–24.00	10.00–14.00	15	9	9	11	11	11	11	9	15	9	9	11	11	11	11	9	15	15	11	15	11	11	11	9

The band selections have been made on the basis of both propagation conditions and operating schedules.
A dash in the band column indicates reception is not expected due to difficult propagation conditions or stations not normally operating in propagationally suitable bands.

Aerials *(Continued from page 59)*

calculations a "perfectly conducting" earth is assumed, but in desert areas this is seldom the case. Here, the performance of the aerial is not what it should be, and this is where the counterpoise comes in. It consists of a number of radials stretching from a point directly under the place where the aerial enters the house. The radials each have a length of 20–30 feet and are either bare and dug in, or insulated and laid on the soil.

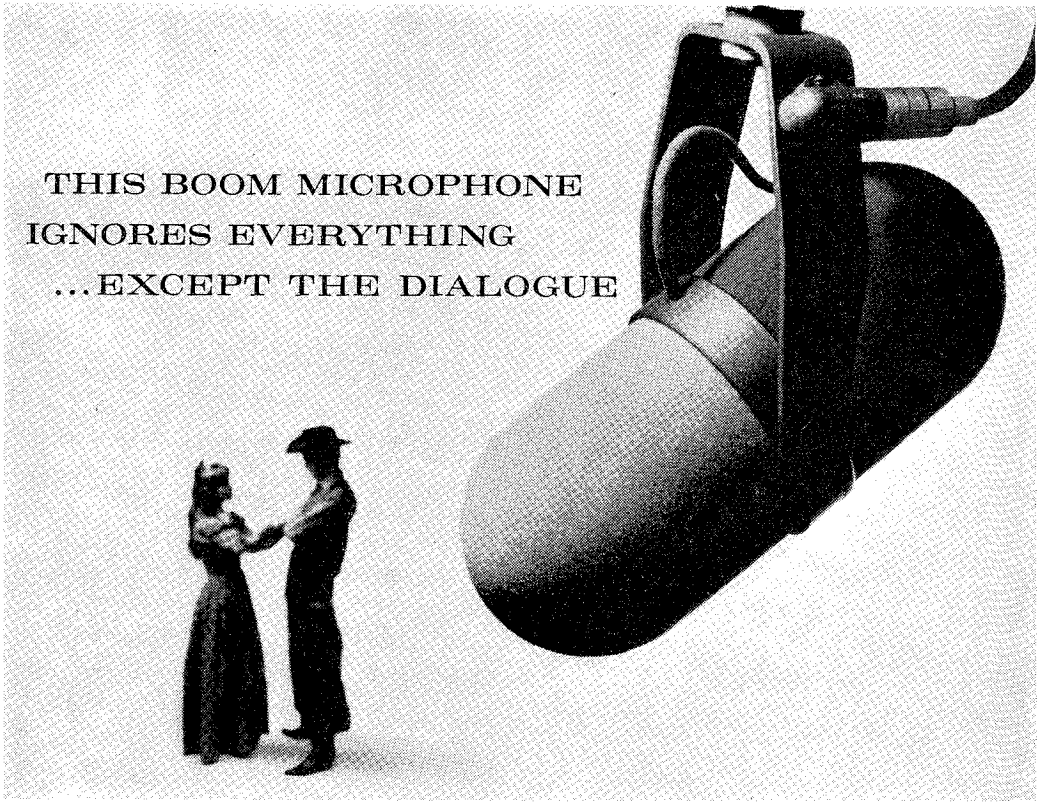
The purpose of this article will have been achieved if it is an incentive to you to do some experimenting. After all, it will turn out to be the cheapest way of improving your reception.

Repairing Your Radio:

We refer to article published in the Summer-Supplement 1966 page 18.

SVERIGES RADIOKLUBB is the oldest DX-club in Sweden. Our printed bulletin "DX-RADIO", mainly in Swedish, features a complete list of SW-stations with a unique time-schedule arrangement. Our members' service includes the famous bilingual reception report forms in English/Spanish and French/Portuguese as well as a long range of other DX-requirements. Annual dues: US $ 3.50; £ 1/2/0; DM 10. Sample copy of "DX-RADIO" and further information against 1 IRC. Write to: SRK, Box 5083, Stockholm 5, Sweden.

THIS BOOM MICROPHONE IGNORES EVERYTHING ...EXCEPT THE DIALOGUE



Consistency of sound track quality on an endless variety of locations and sets can be dramatically improved with the remarkable Shure SM5 Boom Microphone. It "hears" the dialogue rather than the ever-changing character of the surroundings.

Because its cardioid directional pattern is uniquely uniform with frequency and symmetrical about its axis, the SM5 is singularly independent of the effects of environment. Even in extreme shooting situations (such as with tight sets, low ceilings, hard walls, low microphone angles, traffic or air conditioner noise and rumble, and changing distance) the SM5 minimizes sound coloration and ambient noise pickup. Equalization changes — on the set or in transfer — are seldom, if ever, necessary.

The highly effective attached windscreen completely encloses the two-stage mechanical filter, so that there are no external "rubber bands" for the wind to "strum." The absence of response-correcting inductors or impedance transformers assures freedom from hum.

Call on the Shure SM5 to solve your most annoying boom problems!

For additional information and technical data write today, to: Shure Brothers, Inc., Export Department, 222 Hartrey Ave., Evanston, Illinois 60204, U.S.A.

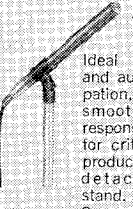
SHURE SM5

UNIDIRECTIONAL DYNAMIC BOOM MICROPHONE

SHURE PROFESSIONAL MICROPHONES . . . FOR BETTER AUDIO

MODEL SM58 CARDIOID DYNAMIC
Extremely versatile in studio, control room, and remote use. Also widely acclaimed for rhythm recording. Bright, clean sound. Exceptionally uniform cardioid pattern gives optimum control of environment.

MODEL SM33 UNIDIRECTIONAL RIBBON
Warm, smooth sound for studio, control room, and scoring stage. Super-cardioid directional pattern. Compact, yet rugged.



MODEL SM76 ¾" OMNIDIRECTIONAL DYNAMIC
Ideal for interviews and audience participation, yet unusually smooth wide range response (40-20 KC) for critical music reproduction. Instantly detachable from stand. Steel case with Cannon connector.

MODEL SM50 OMNIDIRECTIONAL DYNAMIC
Self-windscreened and pop-free for news, sports, remotes, and interviews. Also ideal for many studio and control room applications. Comfortably balanced for hand or stand use. Natural response.

STANDARD FREQUENCY & TIME SIGNAL STATIONS

The ordinary sw, listener soon notices a specialized technical prgr. of tones and time pulses usually received on carrier freq's of 2,5 5, 10 or 15Mc and sometimes on 20 and 25Mc, if he listens in that part of the spectrum. These signals have many uses in science and technology. They are most useful to the non-specialist in obtaining accurate time, in checking the calibration of his radio receiver, and in gaining information on radio propagation conditions. The forecasts of the present and future state of the ionosphere can be quite useful in determining the possibilities of sw-reception. The forecasts are given by WWV and JJY for certain parts of the globe.

R. STATION WWV, WWVH, WWVB and WWVL (Gov.)
St. WWV, Box 83-E, Route 2, Fort Collins, Colorado, USA: Eng-in-Charge. L. Honea. St. WWVH, Box 578, Puunene, Maui, Hawaii: Eng-in-Charge. S. Katahara. WWVB/WWVL, Box 83-E, Route 2, Ft. Collins, Colo, USA: Eng-in-Charge. R.F. Carle – **L.P:** Chief Freq. and Time Broadc. Sce's. D. H. Andrews, National Bureau of Standards, Boulder, Colo, USA.
Standard Radio Frequencies:
WWV 2500kc 2.5kW, 5000kc 10kW, 10000kckc 10kW, 15000kc 10kW, 20000kc 2.5kW, 25000kc 2.5kW: The broadc. are continuous, night and day, exc. from 45 min. to 49 min past each h – **WWVH** 2500kc 1kW, 5000kc 2kW, 10000kc 2kW, 15000kc 2kW: Continuous exc. from 15 min. to 19 min. past each h – **WWVB** 60kc 13kW Continuous – **WWVL** 20kc 1.8kW Continuous, except to permit exp. changes.
Program:
WWV transmits radio propagation forecasts in International Morse Code every 5 min's just preceding the voice ann's; the IUWDS "Geoalert" is broadc. in International Morse Code each h from WWV during the 19th min. and from WWVH during the 49th min. Universal Time is ann. from both st's in Intern. Morse Code each 5 min. At WWV a voice ann. of Mountain Standard Time is given each 5 min. as follows: "National Bureau of Standards, WWV, Fort Collins, Colo. Next tone begins at... hours,...minutes Mountain Standard Time. At WWVH a voice ann. of Hawaiian Standard Time is given each 5 min's as follows: "National Bureau of Standards, WWVH, when the tone returns Hawaiian Standard Time will be... hours, ... minutes". WWWB transmits a special time code consisting of 10db carrier reductions each second for 0.2, 0.5 or 0.8 sec (Format on request). Transmitted phase will be advanced 45° for 5 min. each h between 10 min and 15 min after the h. No special identification will be given. WWVL identifies by keyed carrier given the call sign in Intern. Morse Code on the h and every 20 min. thereafter. Immediately following identification, the freq offset (parts in 10^{10}) is given in Intern. Morse Code by keying the carrier, the word "minus" indicating the minus sign – **V.** by QSL-card or letter. **Pub:** Prgr. sched. on request. In addition to the 20kc carrier other exp. freq's near 20kc may be transmitted alternately or simultaneously.

STATION LOL
Addr: Observatorio Naval, Avenida Costanera Sur 2099, Buenos Aires, Argentina – **L.P:** Dir. Gen: J.E. Marpegán.
Standard Freq. and Signals: 5000kc 2kW – 100000kc 2 kW – 15000kc 2kW; 15 Oct. to last Feb: 11.00–12.00, 14.00–15.00, 17.00–18.00, 20.00–21.00, 23.00–24.00; 1 March to 14 Oct: D 12.00–13.00, 15.00–16.00, 18.00–19.00, 21.00–22.00, 00.00–01.00 – **Schedule:** 3 min dash (1000 or 440cs alternately) beginning at 00.00, 00.05, 00.10 etc. Then 3×LOL in morse followed by "Observatorio Naval Argentina" followed by hrs & min's, preceding dash tone. T.S. transmission at min. 55–59 in each h – **V.** by QSL-card or letter. Re. wanted.

STATION VNG– AUSTRALIAN POST OFFICE
Addr: Station VNG, c/o Assistant Dir. Gen, Radio Section, Postmaster-General's Dept, 57 Bourke St, Melbourne C. 1. Australia. **Cable:** "Gentel" – **Stations:** Lyndhurst: 5425kc 1kW: 12.00–22.30–7515kc: 12.00–22.30(10kW), 22.30–12.00(1kW) – 12005kc 10kW: 22.30–12.00 – The st. has bursts of 1000 c/s per second tone each second, exc. the 59th second of each min. Just before each h a recording is played: "This is an Australian Post Office time signal tr. from VNG in the 5.5, 7.5 or 12Mc bands" – **V.** by QSL-card.

MOUNT STROMLO OBSERVATORY
Addr: Mount Stromlo Observatory, Australian National University, Box 4, P.O. Canberra, A.C.T. Australia. **Te:** Mt. Stromlo 511 **Cable: Solarob.**
L.P: Chief Time Sce: H.J.M. Abraham, Sen Techn. Officer: J.M. Boots.
Stations: VHP 44kc 200kW: 00.25–00.30(exc. Tues & Fri), 07.55–08.00; VHP2 4286kc/VHP3 6428.5kc/VHP4 8478kc/VHP5 12907.5kc/VHP6 17256.8kc(all 10kW): 00.25–00.30, 07.55–08.00, 13.55–14.00, 19.55–20.00.

OBSERVATORIO NACIONAL DE ASTRONOMIA, Brazil
originates time signals, which are broadcast by stations PPE & PPR. **PPE: Addr:** Serviço da Hora, Observatorio Nacional de Astronomia. Rua Gen. Bruce 586, Rio de Janeiro, GB – **L.P:** Chief Eng: C. G. Lacombe – **Station:** 8721kc: 13.25–13.30, 20.25–20.30, 00.25–00.30. **PPR: Addr:** Radio Rio, Av. Francisco Bhering, Arpoador, Rio de Janeiro, GB – Stations: 435, 8634, 13105, 17194kc: 14.25–14.30, 21.25–21.30, 01.25–01.30.

DOMINIAN OBSERVATORY, Canada
Addr: 3, Observatory Crescent, Ottawa 4, Ontario, Canada. **Te:** 232-8211 – **L.P:** Adm: Dr. J. Hodgson. Dir. Tec: M. M. Thomson.
Stations: CHU 3330kc 90.09m 3kW – 7335kc 40.90m 3kW – 14670kc 20.45m 3kW – **T.S:** Continuous in voice and second pulses – **Ann:** English: "CHU Canada, Eastern Standard Time". French: CHU Canada, Heure normale de l'est" – **V.** by QSL-card. **Re.** welcomed – **Pub:** Station information free.

STATION CCV, CHILE
Addr: Instituto Hidrográfico de la Armada, Casilla 324, Valparaiso – **Stations:** 8205/ 12960kc: 11.15–12.00, 13.55–14.00, 15.55–16.00, 21.55–02.00, 00.55–01.00.

STANDARD FREQUENCY STATION OMA
Addr: Budecska 6, Praha 2, Vinohrady, Czechoslovakia. **Te:** 258757 – **L.P:** Dir: B. Sternberk – **Stations:** OMA 50kc 5kW: 24 h – OMA 2500 kc 1kW: 24 h – *OLB5* 3170kc 8kW: 24 h – *OLD2* 18985kc 8kW directed to F. East; Wed, Fri 12.30–13.00 – **Ann:** In morse-code – **V.** by QSL-card. Re. wanted.

CENTRE NATIONAL D'ETUDES DES TELECOMMUNICATIONS
Addr: 3, avenue de la République, Issy-les-Moulineaux-(Seine), France. **Te:** 532-40-00 – **L.P:** Chief Eng. Freq. Dept: P. la Maida, Chief Eng: B. Decaux.
Station: FFH 2500kc 5kW: 08.30–16.25 (Mon–Fri).
Ann: in morse in the 9th and 49th minute, in voice in the 10th, 30th and 50th minute, followed by morse.

BUREAU INTERNATIONAL DE L'HEURE
Addr: 61 Avenue de l'Observatoire, Paris 14, France – **L.P:** Dir. B. Guinot – **Stations:** St. André de Corcy FTA91 91.15kc 45kW 08.00, 09.00, 09.30, 13.00, 20.00, 21.00, 22.30 – Pontoise FTH42 7428kc 6kW: 09.00, 21.00 – FTK77 10775kc 6kW 08.00, 20.00 – FTN87 13873kc 6kW: 09.30, 13.00, 22.30 – **V.** by letter. (Reported with unmodulated timesignals from 5 min's before times mentioned until 6 min's past those times).

ZLFS, LOWER HUTT, New Zealand
Addr: Physics & Engineering Laboratory, Lower hutt, New Zealand. **Station:** 2500kc 0.3kW: CW only Tues 01.00–04.00 – **Ann:** St. identification is made in morse code at the beginning & end of each tr.

DCF77, MAINFLINGEN, Germany
Addr: Physikalisch-Technische Bundesanstalt, Braunschweig, Bundesallee 100, Fed. Rep. of Germany. **Cable:** "Bundesphysik". **Te:** 5921 – **L.P:** Pres: Prof. Dr.-Ing. M. Kersten; Dir. of Dept. I: Prof. Dr. U. Stille; Dir. of Sect. IA: Prof. Dr. U. Adelsberger; Dr. Ohl, Dr. Süss – **Station:** DCF77 77.5kc 12kW, nd transm. extends essentially from 06.45–10.35, 19.00–20.10 and around every full h until midnight. Call-sign DCF77 in morse-code, amplitude modulation 440 c/s.
Pub: Prgr. sched. on request.

GERMAN HYDROGRAPHIC INSTITUTE
Addr: Bernard Nochtstrasse 78, 2 Hamburg-4, W. Germany. **Te:** 311121. **Cable:** Hydrodienst
L.P: Head Time Sce: H. Enslin. Unmodulated timesignals at:
23.55-00.06 on DAN-2614kc (2kW), DAM-6475.5kc (5kW) (21/3-20/9), DAM-12763.5kc (15kW) (21/3-20/9), DAM-4265kc (5kW) (21/9-20/3), DAM-8638.5kc (10kW) (21/9-20/3).
11.55–12.06 on 2614, 8638.5, DAM-16980kc (15kW). 11.55–12.00 and 23.55–00.00 on DAO-2775 kc (2kW).
DAM = Elmshorn; DAO = Kiel; DAN = Norddeich.

GERMAN GEODETIC INSTITUTE
Addr: DDR15 Potsdam, Telegrafenberg 17 – **L.P:** Dipl. Ing: G. Hemmleb – **Station:** Nauen (DIZ) 4525kc 5kW: 09.45–08.15.

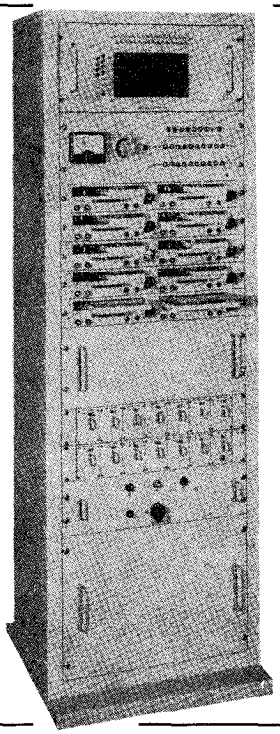
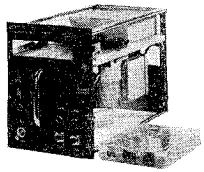
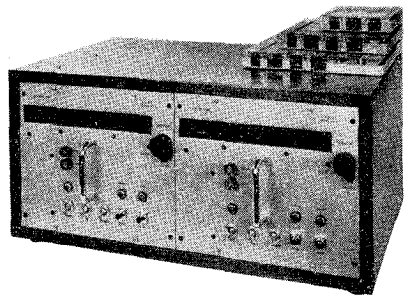
NATIONAL PHYSICAL LABORATORY (Gov.)
Addr: Teddington, Middlesex, Gt. Britain. **Te:** 3222. **Cable:** Physics
MSF Standard Frequency Service:

kc	m	kW		kc	m	kW	
60	5000	10	continuous*	5000	60	0.5	continuous*
2500	120	0.5	continuous*	10000	30	0.5	continuous*

*continuous but tr. interrupted 6 times an h at min's 5–9½, 15–19½, 25–29½ etc.
Ann: Call sign and freq. offset (in parts in 10^{10}) 3 times in slow morse, at min's 9½–10, 19½–20, etc. in each h – **V.** by letter.

(Continued page 64)

RAI RADIOTELEVISIONE ITALIANA

The complete line of endless loop professional tape reproducers for broadcasting stations

APPEL

APPARECCHIATURE ELETTRONICHE

VIA LA THUILE, 27 - TORINO TEL. 380.832

Standard Frequency & Time Signal Stations

(Continued from page 62)

ROYAL GREENWICH OBSERVATORY
Addr: Time Dept. Herstmonceux Castle, Hailsham, Sussex, England. **Te:** 3171. **Cable:** Observer.
The international t.s's are radiated by GBR 16kc (reserve: GBZ 19.6kc) at 03.00, 09.00, 15.00 & 21.00 and on high freq's at 09.00 and 21.00. The freq's used are selected according to current ionospheric predictions. Freq's available: GIC24 4025kc, GAY25 5807kc, GIC26 6985kc, GIC27 7397.5kc, GIC29 9350kc, GPB30B 10331.5kc, GPB30 10332.5 kc, GKU5 12790kc, GIC33 13555kc, GIC37 17685kc, GIA39 19640kc. (Powers: GBR 350kW, GBZ 250kW, others 15kW).

ATA, NEW DELHI, INDIA
Addr: National Physical Laboratory, New Delhi.
Stations: 10000kc 2kW: Mon–Fri 05.30–07.30.

IAM, ROME,ITALY
Sddr: *Istituto Superiore, Ministero P. T, Rome.*
Atation: 5000kc 1kW – All days exc. Sun 07.30–08.30.

IBF, TURIN, ITALY
Addr: Istituto Elettrotecnico Nazionale, Corso Massimo d'Azeglio, 42, Torino. **Te:** 688773 – **Station:** 5000kc 5kW: W 06.45–07.00, 08.45–09.00, 09.45–10.00, 10.45–11.00, 11.45–12.00, 12.45–13.00, 13.45 –14.00, 14.45–15.00, 15.45–16.00, 16.45–17.00, 17.45–18.00 – **Ann:** "Emissioni di frequenze e tempo campioni dal l'Istituto Elettrotecnico Nazionale" – **V.** by letter.

STATION JJY
Addr: Radio Research Laboratories, Koganei, Tokyo, Japan. **Te:** (04.23)-81-1661 – **L.P:** Chief Standard Freq. Section. **Y.** Saburi – **Stations:** All 2kW nd, 24 h: 2500kc – 5000kc – 100000kc – 15000kc. All freq's are interrupted at 29–34 min. past each h. Mod. seconds pulses of 8 cycles of 1600c/s, and 1000 c/s tone – **Ann:** At 34-35 min's & 59-00 min's in each h. identifying signals are tr. consisting of call sign in morse code (twice), time in JST once in morse code, call sign twice in voice, time in JST once in voice and grade of propagation warning in morse code – **V.** by QSL-card.

TOKYO ASTRONOMICAL OBSERVATORY
Addr: Time Division, Mitaka near Tokyo.
Station: JAS22-16170kc 10kW directed to Europe 12.25-12.30 daily.

STATION OBC, PERU – **Addr:** Estación Central de Comunicaciones Navales Radio, Callao, Peru. **Stations:** OBC 490/8650/12307kc: *15.55–16.00, 18.55–19.00, 00.55–01.00.*

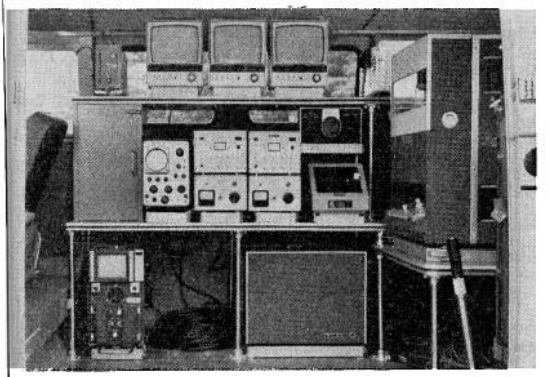
REP. OBSERVATORY SOUTH AFRICA
Addr: Republic Observatory, Johannesburg. **Te:** 43-2026. **Cable:** Astronomer – **L.P:** J. Hers – **Stations:** Call ZUO: Olifantsfontein 5000kc 4kW – Johannesburg 10000kc 0.25kW – Johannesburg 100Mc 0.050kW directional. 24 h per day, exc. for interruptions 15 to 25 min. past each h.
Time Signals: Continuous second pulses, consisting of 5 cycles of 1000c/s tone. The minute pulse in prolonged to about ½ second – **Ann** In morse code every 15 min's (just before each quarter hour): ZUO. ZUO, ZUO followed by the Universal time of the next minute – **V.** by letter will be answered if they are genuine reports.

HBN NEUCHATEL OBSERVATORY
Addr: Neuchatel, Switzerland. **Cable:** Observatoire. **Te:** (038)-5-1238
L.P: Dir: J. Bonanomi, W. Schuler – On 5000kc all day long:
Prgr. of tr: continuous tr. interrupted every 5 min. for 5 min. according to the following schema: 00m 00s – 04m 50s silence, 04m 50s – 05m 00s HBN (A_2), 05m 00s – 10m 00s carrier tr. with seconds pulses, 10m 00s – 14m 50s silence, etc – Within the h, the tr. is the following: Minutes 0–5 silence, 5–10 carrier and seconds pulses, 10–15 silence, 15–20 carrier and seconds pulses, 20–25 silence, 25–30 carrier and seconds pulses, 30–35 silence, 35–40 carrier and seconds, 40–45 silence, 45–50 carrier and seconds, 50–60 silence.

US NAVAL OBSERVATORY, Navy Department, Washington, *DC. 20390, USA.* **L.P:** Dir. Time Sce. Div: Wm. Markowitz.
VLF Time Signals are aired from 55 to 60th min's as follows: **NSS** (Annapolis): each h on 21.4kc; **NBA** (Canal Zone): each h exc. 23.55–24.00 on 24.0kc – **HF Time Signals,** begin 5 min's before the hand terminate on the h..
NSS: 23.55, 01.55, 05.55, 07.55, 11.55, 13.55, 17.55 on 162kc*, 5870, 9425, 13575, 17050.4, 23650kc (* exc. Thurs 13.55 & 17.55 when on 121.95kc) – **NPG** (San Francisco): 23.55, 05.55, 11.55, 17.55 on 114.95kc, 4010, 6428.5 9277.5, 12966, 17055.2, 22635kc – **NPM** (Honolulu): 05.55, 11.55, 17.55 on 131.05kc, 4525, 9050, 13655, 17122.4, 22593kc – **NPM** (Guam) 23.55, 05.55, 11.55, 17.55 on 484, 4955, 8150, 13530, 17530, 21760kc – **NBA:** 04.55, 09.55, 16.55, 22.55, on 147.85kc, 5448.5, 11080, 17697.5, 22515kc.

SONY's Integrated Engineering Produces A Mobile Video Recording Station The SONY VTR CAR

Developed against a background of pioneering leadership in the design and manufacture of high-quality solid-state video station equipment, we now present the SONY VTR CAR, a mobile video recording station. This compact, highly versatile and reliable system is suitable not only for parked on-the-spot recording but for on-the-move recording, too—while actually following races, marches or motorcades.



Interior view of the Mobile Video Recording Station Showing Monitor receivers, video recorder and other auxiliary equipment.

Mounted in a Volkswagen Micro Bus, the heart of the system is SONY's solid-state BV-120 Videocorder, which has been proven and applauded for its time-base-stability, picture-resolution and over all reliability. Two SONY Model IIC-500 Television Cameras are also furnished, with camera heads, control units, power supplies and fitted with the F4/50mm—200mm zoom lens. Three SONY 9-inch Picture Monitors are installed at the control position inside the van.

Prime power is supplied by an Onan's gasoline engine generator mounted in the rear compartment of the van, and it's stabilized by an automatic voltage regulator. Write for our detailed brochure which completely describes this latest product of SONY's Integrated Engineering.

Research Makes The Difference

SONY®

SONY CORPORATION 351, Kitashinagawa-6, Shinagawa-ku, Tokyo, Japan / **SONY CORPORATION OF AMERICA** 516 W. Florence Ave., Inglewood, California. U.S.A./**SONY OVERSEAS S.A.** Baarerstrasse 73, Zug, Switzerland

RELIGIOUS BROADCASTING ORGANIZATIONS

WORLD ASSOCIATION FOR CHRISTIAN BROADCASTING

(formerly "World Committee for Christian Broadcasting"), constituted a its Limuru, Kenya, Assembly in May 1963.

Purpose: "To provide a working fellowship of churches, agencies, organizations and persons concerned with the use of radio and television to proclaim the Christian Gospel in its relevance to the whole of life, and with the role of these media in society." (WACB Constitution).

Addr: Edinburgh House, 2 Eaton Gate, London SW 1, England. **Cable:** Wachrib – **Exec. Dir:** Rev. E. H. Robertson. **Research Secr:** Rev. John Poulton. **Associate Exec. Dir's** office: 150 route de Ferney, 1211 Geneva 20, Switzerland (Rev. C. Michael de Vries). **European Office:** Birkerstr. 22, 8 München 2, Germany (Kirchenrat R. Geisendörfer). **Chmn:** Bishop F. Birkeli, Norway. **Vice-Chmn:** Rev. K. D. Bhasker, India. **Treasurer:** Rev. Frederick R. Wilson, USA. **Secr:** William N. Haddad, Lebanon. **Regional Representatives:** Africa: E. Fashade, Nigeria. Asia: M. Ogawa, Japan. Europe: Dr. R. Ley, Switzerland. Latin America: Dr. A. J. Ribeiro, Brazil. Near East: William N. Haddad, Lebanon. North America: Dr. H. Spencer, USA – **Official Journal:** "The Christian Broadcaster", Editor: Rev. H. H. Hoskins, London. German edition: "Medium", Editor: Christian Hoffmann, München. Spanish edition in preparation – **Membership:** Corporate and Personal.

WORLD COUNCIL OF CHURCHES

The Rev. C. Michael de Vries, Secretary for Work in the Field of Broadcasting, Dept. of Information. **Addr:** 150, Route de Ferney, 1211 Geneva 20, Switzerland.

LUTHERAN WORLD FEDERATION BROADC. SERVICE

Director: Rev. Sigurd Aske, Ph. D, P.O. Box 654, Addis Ababa, Ethiopia – Publications: occasional newsletters.

ROMAN-CATHOLIC

Pontifical Commission for the Communications Media.

Addr: Palazzo S. Carlo, Vatican City State. **Pres:** Archbishop of Laodicea in Syria the Most Reverend Martin J. O'Connor.

UNDA: Association catholique internationale pour la Radiodiffusion et la Télévision (International Catholic Organization for Broadcasting and Television).

Protector: Bishop of Lausanne, Genève and Fribourg, Mgr. François Charrière, Fribourg, Switzerland.

Secretariat General: Rue de Romont 5, Case Postale 211, 1701 Fribourg, Switzerland.

Secr. Gen: Dr. J. Schneuwly.

Administration Council: consist of 12 members **Pres:** Mgr. J. Haas, Lausanne, Switzerland. Consultative status of UNESCO.

Secretariat for Latin America: 385, Rua São Clemente, Rio de Janeiro. Dir: Miss Marina Bandeira de Carvalho, Rio de Janeiro, Brazil.

Members of the Organization:

Ordinary members: Germany, England, Austria, Belgium, Scotland, Spain, France, Ireland, Italy, Luxembourg, Monaco, Netherlands, Switzerland, Vatican State.

Brazil, Bolivia, Canada (English- and French speaking sections), Chile, USA, Venezuela, Malagasy Rep; Argentina, Australia, Malta, Mexico, Nicaragua, Rhodesia, New Zealand.

Extraordinary members: Denmark, Portugal, Sweden, Curaçao, Haiti, Dominican Rep, Guadeloupe, Martinique, Panama, Costa Rica, Honduras, Guatemala, El Salvador, Puerto Rico, Colombia, Peru, Paraguay, Uruguay, St. Lucia, French Guiana, Ecuador. Zambia, Burundi, Congo (Kinshasa), Congo (Brazzaville), Ivory Coast, Central African Rep, Dahomey, Upper Volta, Rwanda, Senegal, Togo, French Somaliland, Réunion, New Caledonia, Algeria, South Africa Rep, Japan, Philippines, Vietnam, Taiwan, Trinidad.

Corresponding members: Finland, Norway, Dutch Guiana, Greece, Egypt, Morocco, Tunesia, Angola, Mozambique, Lesotho, Hong-Kong, Tasmania, India, Pakistan, Lebanon, Iraq, South Korea.

UNDA-Revue: French and English.

RELIGIOUS SOCIETIES PROTESTANT

ERA: Evangelical Radio Alliance, 30 Bedford Place, London W.C. 1, England. Secr: Rev. J. Hywel Davies.

IBRA Radio Mission, Box 821, Stockholm I, Sweden, Memberorganization: IBRA Radio Federation is an intern. fed. of listeners. (See Sweden).

IKOR (Ecumencial society): Interkerkelijk Overleg in Radioaangelegenheden, Hilversum, Borneolaan 27.

NCRV, Nederlandsche Christelijke Radio Vereeniging, Schuttersweg 8, Hilversum.

NOREA: Nordic Radio Evangelistic Association. In connection with Norwegian Lutheran Mission. Cooperating with Trans World Radio, Monaco. Broadcasting over R. Monte Carlo (See Norway and Finland).

VRPO, Vrijzinnig Protestantse Radio-Omroep, Hilversum, Holland.

Radio Reveil, Via Tesserete 51, Lugano.

AFRICA:

CENTAVEP: Centre des Techniques Audio-Visuelles de l'Eglise Presbytérienne Camerounaise, B.P. 187, Yaounde, Rép. Fédérale du Cameroun. Dir: J. Azombo (Is owned by the Cameroun Presbyterian Church, but helps the other Protestant Churches of the Federation).

AMERICA:

Trans World Radio: Home office: 354 Main Str, Chatham, New Jersey, USA. Dir. of Radio: B. L. Armstrong, M.A, B.D. (Owns and operates two st's in Monaco and Bonaire, Neth. Antilles).

National Religious Broadcasters, an association of Protestant national and intern. broadcasters on radio and tv. Pres: Dr. E. R. Bertermann, 210 North Broadway, Saint Louis 2, Missouri.

International Christian Broadcasters, an international service organization for those who use radio and television to proclaim the Gospel, and to encourage the use of these mass media throughout the world for the furtherance of the Gospel. Sponsors of national and international conferences.

Addr: 4440 Saratoga, Downers Grove, Ill, USA. Pres: Clarence W. Jones. Exec. Secr: Richard Wolff.

Lutheran Television Productions, a Board of the Lutheran Church-Missouri Synod, producing and distributing "This is the Life" and "The Fisher Family", Exec. Secr: Dr. E. R. Berterman. Prgr. Dir: Dr. H. W. Gockel, 210 No. Broadway, Saint Louis 2, Missouri.

Difusiones Inter Americanas: (DIA), an evangelical organization, established to produce, process, distribute and promote radio and tv. prgr's, recordings and audio visual aids for the evangelizing of Latin America – Addr: Apt. 2470, San José, Costa Rica.

Latin America Mission, 285 Orchard Terrace, Bogota, N.J. and Apt. 1307, San José, Costa Rica. Publ: "Radio Headlines".

Central American Mission, (operates TGNA, Guatemala), 3611 Congres Ave, Dallas, Texas.

Centro Audio-Visual Evangelico, (CAVE), produces and distributes religious, educational and cultural audio-visual material, non-projected aids, filmstrips, slides, projectors, LP records, radio programs as well as dubbing of TV films in Portuguese. Studios and filming laboratories are made available to other organizations upon request. Gen. Secr: Dr. William E. Haney, C.P. 943, Campinas, São Paulo, Brazil.

The Evangelical Alliance Mission, P.O. Box 969 Wheaton, Ill. 60187, USA. Gen. Dir: V. Mortenson, Operates HLKX, Inchon, Rep. of Korea, PJA-6, Aruba, Neth. Antilles, OAZ, Lima, Peru.

The Gospel Missionary Union. Headquarters, Smithville, Mo. USA. Pres: Don P. Shidler. Publ: Gospel Message.

West Indies Mission, R. D. 1, Box 279 Homer City, Penn. USA – Dir. Gen: Rev. E. V. Thompson. Dir. of Radio Haiti Field: Rev. David Hartt. Publ: "The Whitened Harvest". Is working in the West Indies and in South America.

Broadcasting and Film Commission NCCUSA, New York, USA. National Council of Churches of Christ in the USA, 475 Riverside Drive, New York 10027. Exec. Dir: W.F.Fore.

RAVEMCCO, New York, USA, Radio, Visual Education and Mass Communication Committee of the Division of Overseas Ministries of the National Council of the Churches of Christ in the USA, 475 Riverside Drive, New York 10027, N.Y, Dir: Dr. B. M. Luben.

Far East Broadcasting Co. Inc, P.O. Box 1, Whittier, California. Pres: Robert H. Bowman. Private Comp. with offices in twelve countries. Publ: "FEBC Broadcaster" monthly. Operates st's in Manila (Philippines), Naha (Okinawa) & San Francisco (USA).

The Lutheran Hour "Bringing Christ to Nations", Saint Louis, USA. Sponsored by The Lutheran Laymen's League, 2185 Hampton Avenue, St. Louis, Missouri 63139. Exec. Dir: P. Friedrich.

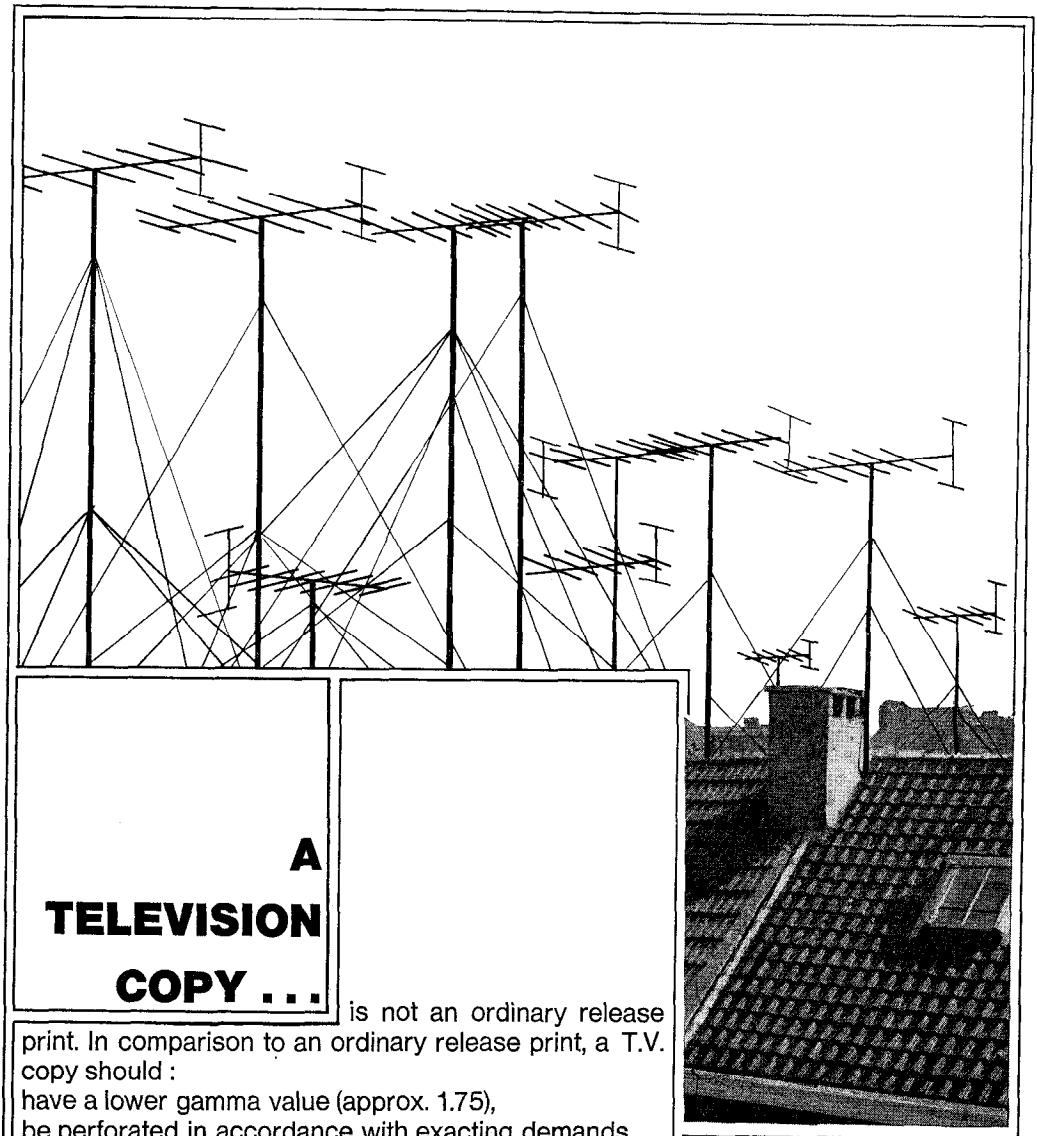
The Oriental Missionary Society and the **Inter American Missionary Society,** P.O. Box A, Greenwood, Indiana 46142, USA. Pres: Dr. Eugene A. Erny. Dir. Haiti Field incl. allied missionary activities: E. Turnidge, Box I, Cap Haitien, Haiti. Operates St: 4VEH, Cap Haitien, Haiti.

World Radio Missionary Fellowship: HCJB-TV, Quito, Ecuador; HOXO, Panama, R.P. USA. Pres: Abe Van der Puy, P.O. Box 691, Miami, Florida. Operates La Voz de los Andes HCJB Ecuador; No. American Headquarters P.O. Box 691, Miami, Florida 33147.

Canadian Baptist Foreign Mission Board, 190 St. George Str., Toronto 5, Ontario, Canada. Gen. Secr: Dr. O. E. Daniel. Operates R. La Cruz del Sur, La Paz, Bolivia.

ASIA AND PACIFIC:

The Near East Council of Churches: Rev. Albert Isteero, General Secretary; William N. Haddad Gen. Dir. of the Commission on Radio Broadcasting, P.O. Box 5376, Beirut, Lebanon.



A TELEVISION COPY . . . is not an ordinary release print. In comparison to an ordinary release print, a T.V. copy should :
have a lower gamma value (approx. 1.75),
be perforated in accordance with exacting demands,
have a finer grain for the sharpest details.
Furthermore, it should also be possible to process a T.V. copy together with ordinary positive films.
Gevaprint film for T.V. - type 5.64 meets all these requirements.

Apply for detailed information to : Gevaert-Agfa N.V., Mortsel (Belgium)

52E (765)

AGFA-GEVAERT

GEVAERT

GEVAPRINT FILM FOR T. V.

ABBREVIATIONS:

Addr. = Address
AD = Advertising
Adm. = Administration
Adv. = Advertisement
Ag. = Acting
Amat. = Amateurs
ALF = Annual License Fee
A.M. = Amplitude modulation
Ann. = Announcement
Ant. = Antenna
Approx. = Approximately
Apr. = April
Apt. = *Apartado*
Assoc. = Associate(ion)
Asst. = Assistant
Aug. = August
Av. = Avenue, Avenida
B.P. = Boite Postale
Br. = *British*
Broadc. = Broadcast(ing)
C = Central
Ca. = Calle
Cas. = Casilla
Ch. = Channel
Chmn. = Chairman
Ci. = Ciudad
Co. = Company
Comm. = Commercial
Contr. = Controller
Corp. = Corporation
C.P. = Caixa Postal
Cra = Carrera
c/s = Cycles per second
D = Daily
d. = Directional aerial
Dec. = December
Def. = Definition
Dem. = Democratic
Dept. = Department
Dep. = Deputy
Dir. = Director
Dir. Gen. = Director General
Div. = Division
DX = Long distance
E. = *English*
Ea. = East
E. by R. = English by Radio
Ed. = *Edificio*
Educ. = Education, Educational
Emis. = Emisora
Equip. = Equipment
Eng. = Engineer, Engineering
ERP = Effective radiated power
exc. = Except
Exec. = Executive
exp. = Experimental
Feb. = February
Fed. = Federal
F. = French
F.I. = Financing
Fi. = Finnish
Fl. = Flemish
F.M. = Frequency modulation
F.PL. = Future plans
For. Rel. = Foreign Relations
Fri = Friday
Freq. = Frequency
G. = German
G.C. = Geographical Coordinates*
Gen. Mgr. = General Manager
G.M.T. = Greenwich Mean Time
Gov. = Government
Gr. = Greek
h = Hour
H = Horizontal polarisation
Hqs. = *Headquarters*
I = Italian
incl. = including
Inf. = *Information*
Int. = International
Int. Sig. = Interval Signal
Isl. = Islands
Jan. = January
kc = Kilocycles
kW = Kilowatt
L.P. = Leading Personalities
L = Language
L.N. = Local News
L.L. = Language Lessons
L.T. = Local Time
Man. = Managing
Mgr. = Manager
Miss. = Missionary
Mon = Monday
m.b. = Meter band
Mbg. = Mailbag
MW. = *Medium* Wave
N. = News
Nac. = Nacional
Nat. = *National*
Net. = Network
nd = non directional antenna
No. = North
Nov. = November
OBV = Outside broadcast vehicles
occ. = Occasionally
Oct. = October
Org. = Organization
Pa. = Pacific
P. = Portuguese
Po. = Population
Pol. = Polarisation
P.R. = Peoples Republic
Pr. = Private
Prod. = Production
Pr.L. = Principal Languages
Pres. = President
Prgr. = Programme
Pub. = Publication
R = Radio
Rcvrs. = Receivers
Re. = Report
Rec. = Records
Red. = Rediffusion
Rdif. = Radiodiffusion
Reg. = Regional
Rel. = Relay(ing), Relations
Rlg. = Religious
Rep. = *Republic*
Rf. = Rundfunk
Rp. = Return postage required
Rus. = *Russian*
Sat = Saturday
Sce. = Service
sched. = Schedule
Secr. = Secretary
Sen = Senior
Sep. = September
So. = South
Soc. = Sociedad(e)
So. We. = South West
Sp. = Spanish
SSR = Sovjet Socialist Rep.
St. = Station
Str. = Street
Su. = Summer
Sun = Sunday
Superv. = Supervisor
SW. = Shortwave
Te. = Telephone
Techn. = Technical
Terr. = Territory
Thurs = Thursday
Tr. = Transmitter
Trop. = Tropical
Tues = Tuesday
T.V. = Television
UHF = Ultra High Frequency
Univ. = University
V = Vertical polarisation
V. = *Verification*
VHF = Very High Frequency
W = Weekdays
We. = West
Wed = Wednesday
Wi. = Winter
Wrp. = Weather report
* given in degrees and minutes.

Abbreviations of broadcasting organizations, countries and firms
ABC = Australian Broadc. Comm – AFN = American Forces Network AFRTS = Armed Forces Radio and Television Sce – AIR = All India Radio – BBC = British Broadc. Corp – BBCFES = BBC Far Eastern Station – BCC = Broadcasting Corpo. of China – BFN = British Forces Network – BR = Bayrischer Rundfunk – BRT = Radiodiffusion Television Belge – CBC = Canadian Broadc. Corp – COPE = Cadena de Ondas Populares Espanola – DW = Deutsche Welle – FBS = Forces Broadc. Service – FCC = Federal Communications Commission – FEBC = Far East Broadc. Company – ITA = Independent Television Authority – NDR = Norddeutscher Rundfunk – N.H.K. = Nippon Hoso Kyokai – NZBS = New Zealand Broadc. Sce – OCORA = Office de Cooperation Radiophonique – RAE = Radiodifusion Argentina al Exterior – RAI = Radiotelevisione Italiana – RBI = R. Berlin International – REM = Red de Emisores del Movimiento – RFE = Radio *Free Europe* – RIAS = Rundfunk *in Am. Sector* – RNE = Radio Nacional de Espana – RRI = Radio Republik Indonesia – RSA = Radio South Africa – RTB = Radiodiffusion Television Belge – ORTF = Office de *Radiodiffusion Television Francaise* – SABC = So. African Broadc. Corp – SBC = Swiss Broadc. Co – SDR = Süddeutscher Rundfunk – SER = Sociedad Espanola de R.dif – SR = Saarländischer Rundfunk – SSS = Swiss Shortwave Service – SWF = Südwestfunk – VOA = Voice of America – WDR = Westdeutscher Rundfunk – WNYW = R. New York Worldwide – UN = United Nations.
Af = Africa – Am = America – Au = Australia – As = Asia – Co = Congo – Czech = Czechoslovak Socialist Rep – Eu = Europe – FE = Far East – ME = Middle East – NE = Near East – GB = Great Britain – G.D.R. = German Democratic Republic – Isl = Islands – N.Z. = New Zealand – UAR = United Arab. Republic – UK = United Kingdom of Gt. Britain – USA = United States of America – USSR = Union of the Soviet Socialist Republics.
Abbreviations of firms: AKG = Akustische und Kino-Geräte G.m.b.H, Vienna – AWA = Amalgamated Wireless Australia Ltd – CFTH = Compagnie Française Thomson Houston, Paris – CFS = Compagnie Generale de Telegraphie Sans Fil, Paris – GE = General Electric – L.G.T. = Laboratoire General des Telecommunications – NEC = Nippon Electric Company, Tokyo – RCA = Radio Corporation of America – STC = Standard Telephone & Cables Ltd – T.C.A. = Telecommunications of Australia – TRT = Télécommunications Radioélectriques et Téléphoniques, Paris.
Special Abbreviations for Shortwave Listeners:
Q-Codes: The following "Q" Codes, devised at the Cairo Convention of 1938, are used among shortwave enthusiasts listening to broadcasting stations (socalled DXers): QRG = Frequency; QRK = Readability; QRM = Interference (from other transmitters); QRN = Atmospheric interference (static); QRT = Close down; QSA = Signal *strength*; QSB = *Fading*; QSL = *Verification (of reception)*; QTH = Location.
The following abbreviations are generally used in club publications: *BC = broadcast; BCB = Broadcast band, i.e. medium wave band;* CW = Continuous Wave, i.e. morse code; HF = High Frequency; ID = Station Identification; IRC = International Reply Coupon; LA = Latin America; mx = music; nx = news; OM = Old Man, a general term of greeting; rx = Receiver; SSB = Single Side Band; SWL = Shortwave Listeners; Tnx = Thanks; tr = Transmitter; 73's = Best Wishes.

NEWARK NEWS RADIO CLUB

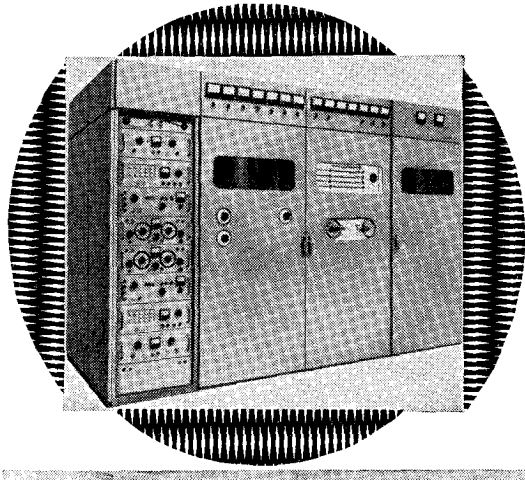
★ Founded in 1927 as the *first* DX listeners' club, NNRC is years ahead of any other in experience.
★ Monthly Bulletin has sections devoted to Standard Broadcast, Shortwave Broadcast, Amateur, Commercial, FM and TV bands, as well as to Card Swapping, NNRC's semi-annual Amateur Band Competitions & Statistics. Well over 600 pages a year to keep you up-to-date!
★ Certificates of Merit are available, to members who qualify, for verifying stations on all bands.
★ To get the most out of your hobby, you should join a club. Go first class; make your club the NNRC.
★ Annual dues, $ 5.00 U.S.; sample Bulletin 25 c.

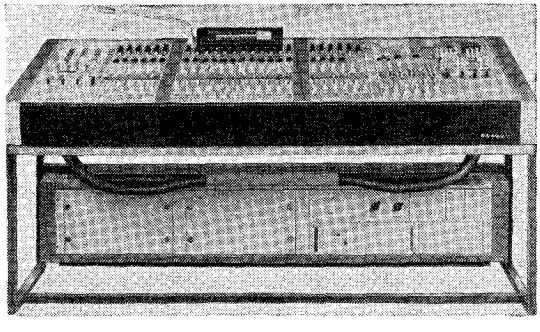
Newark News Radio Club, 215 Market Street, Newark 1, New Jersey, U.S.A.

THE DANISH SHORT WAVE CLUB INTERNATIONAL, P. O. Box 102, Vejlby-Risskov, Denmark, publishes "SHORTWAVE NEWS" (intern) and "KORTBØLGENYT" for Scandinavia (excl. July). Membership fee per year: D.Kr. 18.00, $ 3.00, £ 0/19/0, 25 IRC; airmail extra $ 2.25. Payment to C. E. Engelbrechtsen. P. O. Box 102, Vejlby-Risskov, Denmark.

BROADCAST AND TV EQUIPMENT

TESLA





High-efficiency short-wave broadcasting transmitters of 120 kW output

Medium- and long-wave broadcasting transmitters of 200 kW power output, with possibility of paralleled operation of two or more units

Short-wave communication transmitters of 50 kW power rating, with SSB for transmission of four independent speech channels

Short-wave and long-wave telegraph transmitters of 50 kW and 70 kW power output

Television transmitters for bands I and III as well as IV/V, with power klystrons

Fully transistorized studio equipment

New types of modern design and high efficiency. Projects and installations of complete transmitting centres

Detailed information will be gladly furnished on request

KOVO **Foreign Trade Corporation, Tr. Dukelských hrdinu 47, Praha 7, Czechoslovakia**

WORLD TIME IN ALL COUNTRIES

DIFFERENCE BETWEEN LOCAL TIME AND GREENWICH MEAN TIME

The differences marked + indicate the number of hours ahead the G.M.T. Differences marked − indicate number of hours behind GMT.

	Normal clock Time	Summer Time
Aden	+3	+3
Afghanistan	+4½	+4½
Alaska[1]	−8	−8
Albania	+1	+1
Algeria	GMT	GMT
Andorra	+1	+1
Angola	+1	+1
Argentina	−4	−3 (Oct-Feb)
Ascencion Isl.	GMT	GMT
Australia		
a) Victoria New South Wales, Queensland, Tasmania,	+10	+10
b) N. Territory S. Australia	+9½	+9½
c) W. Australia	+8	+8
Austria	+1	+1
Azores	−2	−1 ¼-1/10
Bahamas	−5	−5
Bahrain	+4	+4
Barbados(W.I.)	−4	−4
Botswana	+2	+2
Belgium	+1	+1
Bermuda	−4	−4
Bolivia	−4	−4
Brazil		
a) Eastern and Coastal.	−3	−2a
b) Manaos	−4	−3a
c) Acre	−5	−4a
Brunei	+8	+8
Bulgaria	+2	+2
Burma	+6½	+6½
Burundi	+2	+2
Cambodia	+7	+7
Cameroon	+1	+1
Canada		
a) New Foundland	−3½	−2½
b) Atlantic (Labrador, Nova Scotia)	−4	−3
c) Eastern (Ontario) Quebec*	−5	−5
d) Central (Manitoba)	−6	−5
e) Mountain (Alberta)	−7	−6
f) Pacific (Br. Columbia)	−8	−7
g) Yukon	−9	−8
Canary Islands	GMT	GMT
Cape Verde Isl.	−2	−2
Central African Rep.	+1	+1
Ceylon	+5½	+5½
Chad	+1	+1
Chile	−4	−4
China		
Peoples Rep.	+8	+8
Shanghai	+8	+8
Canton	+8	+8
Lhasa	+6	+6
Urumchi	+6	+6
Taipei	+8	+9
Colombia	−5	−5
Comores Isl.	+3	+3
Congo, Rep.		
Kinshasa	+1	+1
Lubumbashi	+2	+2
Congo (Brazzaville)	+1	+1
Cook Isl.	−10½	−10½
Costa Rica	−6	−6
Cuba (W.I.)	−5	−4
Curacao	−4	−4
Cyprus	+2	+2
Czechoslovakia	+1	+1
Dahomey	+1	+1
Denmark	+1	+1
Dominican Rep.	−5	−4½
Ecuador	−5	−5
Egypt	+2	+3
El Salvador	−6	−6
Ethiopia	+3	+3
Falkland Islands	−4	−3
Faroe Islands	GMT	GMT
Fiji Islands	+12	+12
Finland	+2	+2
France	+1	+1
Gabon	+1	+1
Gambia	GMT	GMT
Germany	+1	+1
Ghana	GMT	GMT
Gibraltar	+1	+1
Gilbert Isl.	+12	+12
Great Britain	GMT	+1
Greece	+2	+2
Greenland	−3	−3
Guadeloupe	−4	−4
Guam	+10	+10
Guatemala	−6	−6
Guiana	−3¾	−3¾
Guiana (French)	−3	−3
Guinea	GMT	GMT
Guinea (Port.)	−1	−1
Guinea (Sp.)	+1	+1
Haiti (W.I.)	−5	−5
Hawaii	−10	−10
Holland	+1	+1
Honduras(Rep.)	−5	−6
Honduras(Brit.)	−5½	−6
Hong Kong	+8	+9
Hungary	+1	+1
Iceland	−1	GMT
India	+5½	+5½
Indonesia		
a) Java, Sumatra	+7	+7
b) Borneo, Celebes, Bali	+8	+8
c) Moluccas, We. Irian	+9	+9
Iran (Persia)	+3½	+3½
Iraq	+3	+3
Ireland (Eire)	GMT	+1
Israel	+2	+2
Italy	+1	+1
Ivory Coast	GMT	GMT
Jamaica (W.I.)	−5	−5
Japan	+9	+9
Jordan	+2	+2
Kenya	+3	+3
Korea, Rep.	+9	+9
Korea, Dem. Rep.	+9	+9
Kuwait	+3	+3
Laos	+7	+7
Lebanon	+2	+3
Leeward Isl.	−4	−4
Lesotho	+2	+2
Liberia	−¾	−¾
Libya	+2	+2
Luxembourg	+1	+1
Macau	+8	+8
Madeira	−1	GMT ¼-1/10
Malawi	+2	+2
Malaya	+7½	+7½
Malagasy Rep.	+3	+3
Maldive Isl.	+5½	+5½
Mali	GMT	GMT
Malta	+1	+1
Marshall Isl.	+12	+12
Martinique	−4	−4
Mauretania	GMT	GMT
Mauritius	+4	+4
Mexico[2]	−6	−6
Monaco	+1	+1
Mongolia	+8	+8
Morocco	GMT	GMT
Mozambique	+2	+2
Nepal	+5.40	+5.40
Neth. Antilles	−4	−4
New Caledonia	+11	+11
New Guinea	+10	+10
New Hebrides	+11	+11
New Zealand	+12	+12
Nicaragua	−6	−6
Niger	+1	+1
Nigeria	+1	+1
Norfolk Isl.	+11½	+11½
Norway	+1	+1
Pakistan		
a) West	+5	+5
b) East	+6	+6
Panama	−5	−5
Papua	+10	+10
Paraguay	−4	−4
Peru	−5	−5
Philippines	+8	+8
Poland	+1	+1
Portugal	GMT	+1
Puert.Rico(W.I.)	−4	−4
Reunion	+4	+4
Rhodesia	+2	+2
Rumania	+2	+2
Rwanda	+2	+2
Ryukyu Isl.	+9	+9
Sabah (Fed of Malaysia)	+8	+8
Sahara (Sp.)	GMT	GMT
Samoa Isl.	−11	−11
S. Pierre	−3	−3
S. Tomé	GMT	GMT
Sarawak	+8	+8
Saudi Arabia	+3[3]	+3[3]
Senegal	GMT	GMT
Seychelles	+4	+4
Sharjah	+4	+4
Sierra Leone	GMT	GMT
Singapore	+7½	+7½
Solomon Isl.	+11	+11
Somalia	+3	+3
Somali (French)	+3	+3
So. Africa	+2	+2
Spain	+1	+1
Sudan	+2	+2
Surinam	−3½	−3½
Swan Islands	−6	−6
Swaziland	+2	+2
Sweden	+1	+1
Switzerland	+1	+1
Syria	+2	+3
Tahiti	−10	−10
Tanzania	+3	+3
Tasmania	+10	+10
Thailand	+7	+7
Timor	+8	+8
Togo	GMT	GMT
Tonga Islands	+13	+13
Trinidad(B.W.I.)	−4	−4
Tunisia	+1	+1
Turk&CaicosIsl.	−5	−5
Turkey	+2	+2
Uganda	+3	+3
Upper Volta	GMT	GMT
Uruguay	−3	−3
U.S.S.R.		
Moscow, Leningrad	+3	+3
Baku	+4	+4
Sverdlovsk	+5	+5
Tashkent	+6	+6
Novosibirsk	+7	+7
Irkutsk	+8	+8
Yakutsk	+9	+9
Khabarovsk	+10	+10
Magadan	+11	+11
Petropavlovsk	+12	+12
Anadyr	+13	+13
U.S.A.		
a) Eastern Zone	−5	−4
b) Central Zone	−6	−5
c) MountainZone	−7	−6
d) Pacific Zone	−8	−7
Vatican	+1	+1
Venezuela	−4	−4
Vietnam (Rep.)	+8	+8
Vietnam (Dem. Rep.)	+7	+7
Virgin Isl.	−4	−4
West Papua	+9½	+9½
Windward Isl.	−4	−4
Yemen	+3	+3
Yugoslavia	+1	+1
Zambia	+2	+2

* exc. the watch shore and Gaspé regions: 5 h behind GMT.

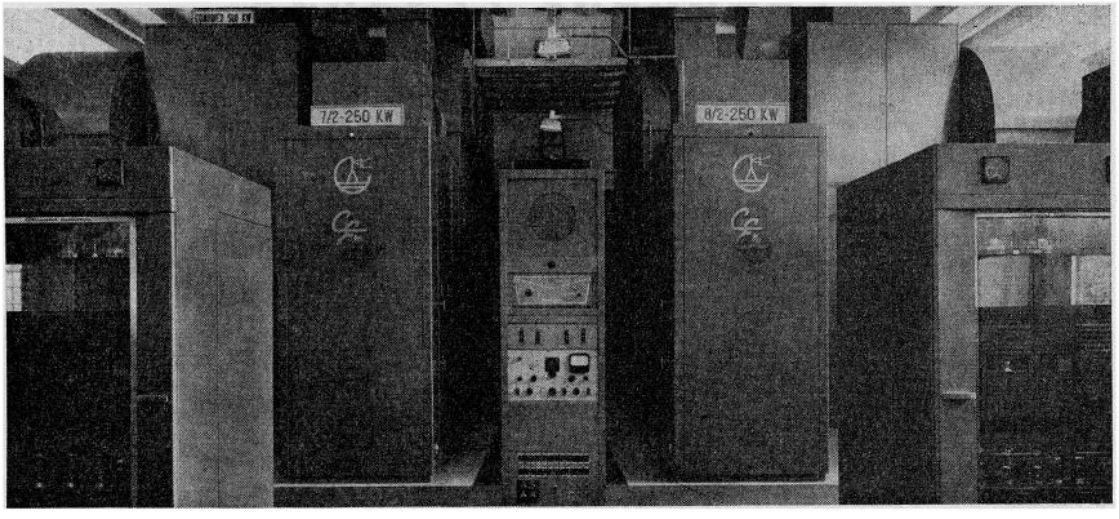
a) Dec-March.

1) a) Ketchikan to Skagway −8
b) Skagway to 141°W. long −9
c) 141°W. long to 162°W. long −10
d) 162°W. long to Westernmost point (incl. Aleutians) −11

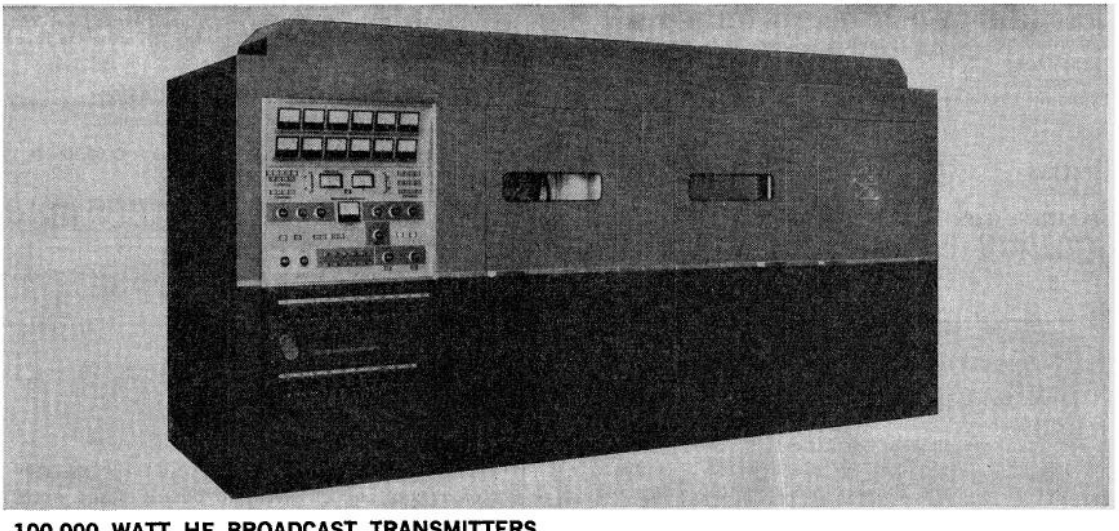
2) Generally −6
Lower Cal.
Pa. coast −7
No. part −8

3) Approx. (based on Sun Time)

CONTINENTAL ELECTRONICS SUPER POWER TRANSMITTERS AROUND THE WORLD



250,000 WATT AND 500,000 WATT HF BROADCAST TRANSMITTERS
Partial view of the Radio Liberty Committee Installation near Barcelona, Spain. This station uses four Continental 250,000 watt HF transmitters; two are combined for 500,000 watt operation. The USIA uses six Continental 500,000 watt HF transmitters at their Greenville, North Carolina Station. Continental is also building ten 250,000 watt HF transmitters for USIA installations in Greece.



100,000 WATT HF BROADCAST TRANSMITTERS
Four Continental Type 418B 100,000 watt HF transmitters are installed at the Emissora Nacional de Radiodifusão broadcasting station in Lisbon, Portugal. Two Continental 100,000 watt HF transmitters are installed in Pakistan.

Continental transmitters range from 5,000 watts to 1,000,000 watts. For descriptive brochures, write: Continental Electronics Mfg. Co.; Box 17040; Dallas, Texas 75217.

Continental Electronics
A SUBSIDIARY OF LTV ELECTROSYSTEMS, INC.

LANGUAGE LESSONS

for English, French, German, Portuguese and Spanish speaking listeners

	Audience	Days & Times
AFRIKAANS		
R. South Africa	English	D 12.10
DUTCH		
R. Nederland, Holl.		
"Dutch by Radio"	English	Wed 00.53, 02.03, 08.03, 15.03, 19.33, 20.33, 21.33, 22.03; Sun 05.30, 07.30, 08.00, 16.00, 07.30
"Holandés por Radio"	Spanish	Wed 00.59, 04.29, 21.59, 22.59; Sun 19.30, 20.00
ENGLISH		
BBC London (English by Radio)	French	D 05.15, 06.45, 07.15, 13.30, 19.15
	German	D 16.45
	English*	D 05.30, 06.45, 12.30, 12.45, 17.00, 18.30, 19.30, 19.45, 22.45
	Spanish	Mon, Wed, Thurs, Fri 07.30
BBC, Far Eastern St.	English*	D 23.30, 00.30, 09.45, 13.45, 16.15
R. St. KGEI, USA	Spanish	W 00.05, 03.05
R. La Cruz del Sur, Bolivia	Spanish	W 23.00
R. Niger, Niamey	French	Mon, Tues, Thurs, Fri 17.15
R. Universidad Técnica, Chile	Spanish	Mon, Wed, Fri 23.30

* lessons entirely in English especially for students of English.

FRENCH		
R. Brazzaville, Congo	English	D 15.45, D exc. Sun & Thurs 18.15
ORTF, France	English	W 13.15
	German	W 18.45
	Portuguese	W 19.15, 23.30
	Spanish	W 00.45
R. Universidad Técnica, Chile	Spanish	Tues, Thurs, Sat 23.30
GERMAN		
"Deutsche Welle", Germany	English	02.00(Mon, Fri), 09.30(Mon, Thurs), 15.40(Mon, Wed, Fri), 16.20(Wed, Sat)
	Portuguese	W 22.30
	Spanish	W 23.40
ITALIAN		
R. Roma	*German*	*Tues, Thurs, Fri 17.30*
JAPANESE (Let's speak Japanese)		
R. Japan Tokyo	English	Mon, Thurs 00.30, 02.45, 06.45, Tues, Fri 10.15, Wed 12.15, 14.45, 18.15
R. Japan	German	Mon 07.15, 19.45
	Portuguese	Thurs 09.45
	Spanish	Wed 01.15, Thurs 09.45
Nihon Shortwave Broadc. Co, Tokyo	English	Mon–Fri 23.15, 10.45
PORTUGUESE		
R. Portugal, Lisbon	English	Tues, Fri 07.45, 08.30, 14.00, 18.30, 20.30; Wed, Sat 02.15, 03.15, 04.15
RUSSIAN		
R. Moscow, USSR	English	11.30(Sun, Wed), 12.15(Sun), 13.00(Mon, Fri), 21.40(Mon)
	German	17.45(Mon, Fri)
SWEDISH		
R. Sweden, Stockh.	English[1]	Sat 09.10, 11.10, 12.40, 14.10, 16.10, 19.10, 20.25, 22.55, 23.40. Sun 00.40, 02.10, 03.40, 05.25
	German[2]	Sun 10.30, 17.30, 23.00
	Portuguese[3]	Mon 22.10, Tues 00.40, 02.10

[1]) „Swedish by Radio I" for beginners, until mid-April 1967. »Swedish by Radio II – Vi läser svenska tidningar« starts in mid-April 1967 and offers 20 lessons for advanced learners – [2]) »Schwedisch im Stockholmer Rundfunk« for beginners, until end of April 1967. »Schwedisches Kaleidoskop« starts at end of April 1967 and offers 20 lessons for advanced learners – [3]) »Sueco para principiantes« begins in March 1967 and offers 18 lessons for beginners.

Additional language courses are broadcast seasonally: Arabic (R. Cairo), Chinese (R. Peking), French (ELWA), German (R. Vienna), Hungarian (R. Budapest), Italian (R. Roma), Ivrith (Kol Yisrael), Russian (R. Moscow for French, Spanish & Portuguese listeners), Spanish (R. Nacional de España).

SPECIAL NEWSBROADCASTS

of interest for listeners studying English.

Dictation News:
BBC, London: W 12.45, 19.45 – R. Cairo, Cairo: D 06.30 – R. Pakistan, Karachi: D 08.30, 13.35.

News in Special English:
"Voice of America": To Europe, Africa, Near East, So. Asia: 15.00, 19.00, 20.00, 21.00, 21.30, 22.00. To Far East: 22.00, 14.00, 15.00, 16.00 To Latin America: 01.00, 03.00.

We refer to the BBC article »Learning Languages by Radio and Television« published in the Summer-Supplement 1966 page 16.

INTERNATIONAL SHORT WAVE LEAGUE.

Join the ISWL and enjoy the following free services: QSL Bureau, Translations (10 languages), Station Identification (broadcast and utility stations), DX Certificates, Contests, Correspondance Bureau, etc. Monthly magazine, MONITOR, contains short-wave station news from official sources and 1400 ISWL members in 80 countries, also contains sections for amateur SWLs, transmitting amateurs, VHF listeners, QSL card collectors, etc.; general articles about short-wave stations, reporting and identifying stations in many languages, members experiences, etc. etc. Annual membership fee £ 1/15/0, US $ 5.00. Write now for free explanatory booklet to: **Dept. WRH, ISWL, 60 White Street, Derby, England.**

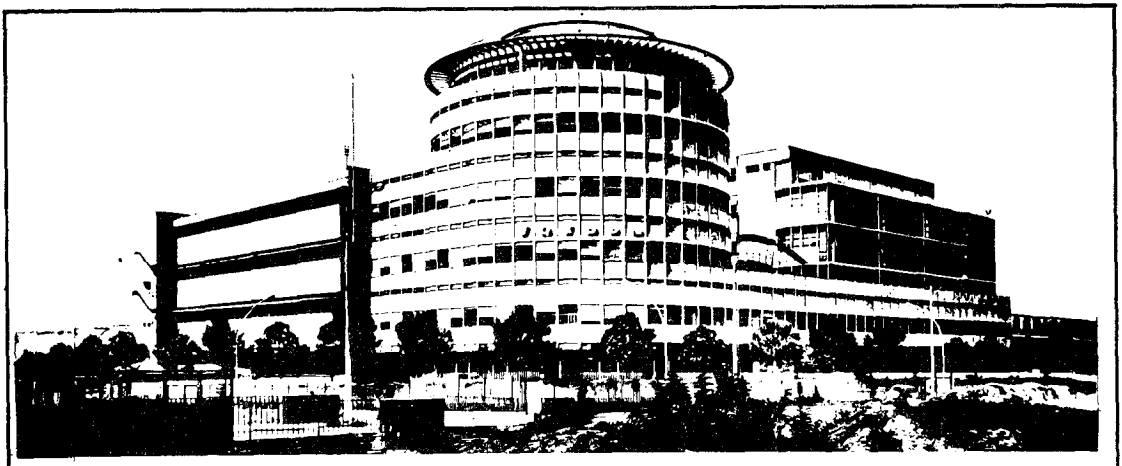
ENGLISH BY RADIO and Television

The BBC's fortnightly magazine for students and teachers of English gives full details of and notes on the daily BBC "English by Radio" transmissions to countries in and near Europe, together with articles and features on the English language.

Subscription for one year (26 issues): 15s. Od.

Write for a free sample copy to:

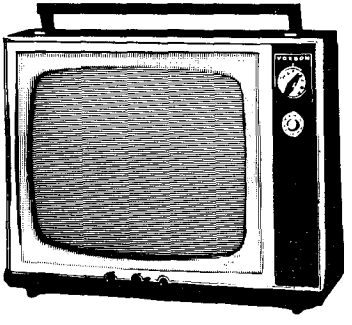
BBC Publications (EbyR)
35 Marylebone High Street
London W1

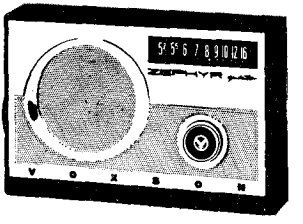


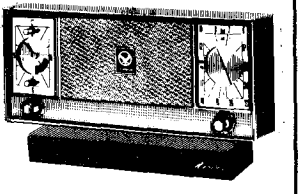
A continuous series of successes in the radio and television fields ■ television sets: all our models are provided with ultrasonic remote control for changing programmes ■ **car radios:** the "Serie Premium" is the most complete series available today. All the models are completely transistorized and are equipped with electronic station seeking for Medium Waves, Long Waves and FM ■ **portable radios:** a wide range which includes the Herald, the radio receiver with the electric clock for automatic switch on and the Zephyr V', the only portable in the world which can be used as a home radio, car radio and can float on the water.

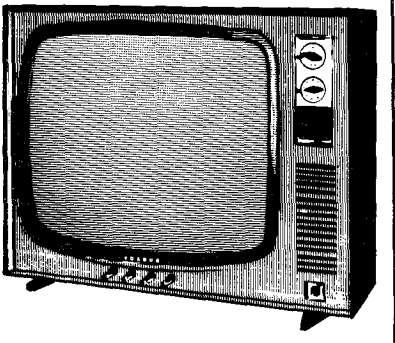
VOXSON

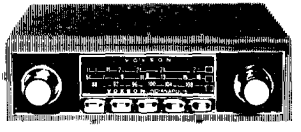
FABBRICA APPARECCHI RADIO E TELEVISIONE S.p.A. ROMA











SET COUNT BY COUNTRY

*=Country with comm. radio and/or comm. television.

Country	Po.	R.Rcvrs.	TV Rcvrs.
*Aden (Fed. of So. Arabia)	1.021.000	60.000	20.000
Afghanistan	14.684.000	24.000	—
Albania	1.840.000	130.000	—
Algeria	12.000.000	480.000	33.000
*Andorra	12.500	3.500	—
*Angola	4.936.000	80.000	—
*Argentina	21.930.000	5.800.000	1.700.000
*Australia	11.537.560	2.537.560	2.248.293
Austria	7.128.000	2.168.807	770.000
*Azores	350.000	42.500	—
*Bahamas	160.000	22.000	—
Bahrain	183.000	50.000	—
*Barbados	250.000	45.000	9.000
Botswana	500.000	4.000	—
Belgium	9.850.000	3.026.086	1.543.476
*Bermuda	52.000	14.000	13.100
*Bolivia	3.549.000	300.000	—
*Brazil	82.000.000	5.000.000	2.500.000
Brunei	100.000	10.000	—
Bulgaria	8.120.000	2.032.500	185.500
Burma	25.246.000	334.936	—
Burundi	2.600.000	50.000	—
Cambodia	6.000.000	35.000	7.000
Cameroon	4.500.000	200.000	—
*Canada	20.000.000	12.000.000	5.000.000
*Canary Islands	1.250.000	130.000	—
*Cape Verde Isl.	211.000	3.700	—
C. African Rep.	1.250.000	32.500	—
*Ceylon	10.900.000	420.000	—
Chad	4.000.000	22.000	—
*Chile	8.518.000	1.360.000	55.000
*Colombia	18.000.000	2.200.000	300.000
Comores Islands	210.000	4.000	—
Congo (Brazzaville)	880.000	60.000	1.600
Congo Rep.	14.799.000	40.000	—
Cook Islands	20.000	1.000	—
*Costa Rica	1.350.000	100.000	65.000
Cuba	7.203.000	1.305.000	555.000
*Cyprus	600.000	145.000	25.000
Czechoslovakia	14.250.000	3.829.899	2.312.254
Dahomey	2.500.000	36.000	—
Denmark	4.720.000	1.500.000	1.118.386
*Dominican Rep.	4.000.000	150.000	25.000
*Ecuador	4.596.000	200.000	15.000
*El Salvador	2.815.000	395.000	35.000
Ethiopia	21.000.000	125.000	5.000
Faroe Isl.	36.000	9.300	—
*Fiji	430.000	36.000	—
Finland	4.633.741	1.590.807	785.787
France	49.157.000	8.586.616	6.875.000
Gabon	630.000	40.000	870
Gambia	316.000	60.000	—
*Germany (Fed. Rep.)	59.614.300	18.101.495	12.295.374
Germany (Dem. Rep.)	17.047.933	5.780.756	3.384.649
Ghana	7.148.000	125.000	5.000
*Gibraltar	25.000	4.000	5.500
Gilbert & Ellice Isl.	47.000	1.500	—
*Great Britain	54.500.000	15.316.310	13.750.000
Greece	8.500.000	861.000	17.000
Greenland	35.500	6.000	—
Guadeloupe	305.000	16.071	2.417
*Guam	80.000	75.000	30.000
*Guatemala	4.098.000	210.000	60.000
*Guiana	638.021	135.000	—
Guiana, Fr.	34.500	3.055	—
Guinea, Rep.	4.010.000	75.000	—
Guinea, Port.	521.336	3.297	—
*Guinea, Sp.	220.000	27.750	—
*Haiti	4.450.000	64.000	10.000
Holland	12.000.000	3.094.079	2.297.352
Honduras, Br.	105.000	10.500	—
*Honduras, Rep.	2.010.000	135.000	15.000
*Hong Kong	3.823.200	700.000	61.000
Hungary	10.160.380	2.500.000	934.057
Iceland	193.758	56.561	12.000
India	449.381.000	5.399.918	6.000
Indonesia	97.765.000	1.250.000	42.500
*Iran	22.530.000	1.700.000	130.000
Iraq	6.800.000	175.000	125.000
Ireland	2.880.752	540.000	302.000
Israel	2.750.000	600.000	30.000
Italy	53.200.000	10.967.527	6.702.544
Ivory Coast	3.600.000	60.000	5.000
*Jamaica	1.900.000	364.500	40.000
*Japan	98.816.843	20.000.000a	18.483.296b
Jordan	2.016.618	130.000	—
Kenya	9.000.000	137.236	10.479
*Korea Rep.	27.763.000	1.395.000	58.000
Kuwait	467.789	100.000	40.000
Laos	2.000.000	30.000	—
*Lebanon	2.600.000	450.000	165.000
*Leeward Isl.	174.800	5.000	2.000
Lesotho	1.000.000	2.500	—
*Liberia	1.500.000	175.000	3.500
Libya	1.500.000	74.000	—
*Luxembourg	335.000	123.573	35.000
*Macau	200.000	6.000	—
Madeira	300.000	35.000	—
Malagasy Rep.	6.243.433	300.000	—
Malawi	4.019.000	80.000	—
Malaysia (Malaya)	9.011.288	365.898	65.000
Mali	5.000.000	30.000	—
*Malta	316.440	83.000[a]	29.490
Martinique	305.000	25.637	2.914
Mauritania	1.000.000	15.000	—
*Mauritius	750.000	125.000	7.500
*Mexico	39.000.000	4.800.000	1.850.000
*Monaco	22.500	6.450	10.000
Morocco	13.323.000	748.387	36.479
*Mozambique	6.750.000	70.000	—
Nepal	9.550.000	45.000	—
*Neth. Antilles	207.000	100.000	17.000
New Caledonia	87.000	14.500	3.000
New Hebrides	66.000	3.000	—
New Zealand	2.700.000	644.447	470.000
*Nicaragua	1.700.000	105.000	19.000
Niger	3.356.331	70.000	—
*Nigeria	52.000.000	500.000	33.000
Norfolk Island	1.152	320	—
Norway	3.700.000	1.100.000	490.000
Pakistan	98.612.000	874.000	2.700
*Panama	1.230.000	220.000	70.000
*Paraguay	1.857.000	160.000	1.000
P.R. of China	670.000.000	8.000.000	—
*Peru	11.521.100	1.800.000	210.000
*Philippines	33.500.000	1.225.000	160.000
Poland	31.619.000	4.546.245	2.500.000
*Portugal	9.234.000[1]	1.202.454[1]	202.276[1]
*Puerto Rico	2.460.000	500.000	400.000b
Reunion	420.000	47.243	4.500
Rhodesia	4.260.000	53.475	31.796
Rumania	19.105.056	2.864.421	575.000
*Ryukyu Isl.	940.000	240.000	130.000
Sabah (Malaysia)	526.881	37.183	—
*Samoa	144.000	14.000	1.000
*São Tome	65.000	3.000	—
Sarawak (Malaysia)	850.000	51.402	—
Saudi Arabia	7.000.000	75.000	25.000
Senegal	3.400.000	260.000	30
Seychelles	47.500	3.000	—
Sierra Leone	2.500.000	23.854	1.150
Singapore	1.890.500	80.398	75.495
Solomon Isl.	139.000	6.000	—
Somalia	2.250.000	36.000	—
Somali, Fr.	80.000	5.000	—
*So. Africa	16.750.000	2.600.000	—
*Spain	32.000.000	4.550.000	2.075.000
St. Pierre et Miquelon	5.000	500	—
Sudan	12.470.000	15.000	11.000
*Surinam	311.000	50.000	—
Swan Isl.	50	10	—
Swaziland	390.000	9.000	—
Sweden	7.801.777	2.931.679	2.140.877
Switzerland	5.850.000	1.666.097	706.534
Syria	5.255.000	275.000	63.000
Tahiti	85.000	30.000	1.500
*Taiwan	12.819.718	1.346.200	120.000
Tanzania	11.000.000	120.000	—
*Thailand	30.000.000	2.765.270	187.382
Timor	517.079	1.812	—
*Trinidad & Tobago	990.500	200.000	35.000
Togo	1.600.000	30.500	—
Tonga	75.000	4.500	—
Trust Territory Pacific	95.000	—	—
Tunisia	4.500.000	370.000	5.500
Turk & Caicos Isl.	6.000	1.000	—
Turkey	31.391.204	2.571.207	2.500
*Uganda	7.016.000	125.000	5.300
United Arab Rep. (Egypt)	30.000.000	4.250.000	375.000
*United States	193.818.000	242.000.000	54.900.000b

Continued page 304

T I E Television International Enterprises Ltd.

represents exclusively:

AFRICA

** Ethiopia (E. B. S.)	Radio and Television
** Kenya (Voice of Kenya)	Radio and Television
Malawi (M.B.C.)	Radio
** Mauritius (M.B.C.)	Radio and Television
Nigeria (N.T.S.)	Television
Nigeria N.B.C.)	* Radio
** Sierra Leone (S.L.B.S. & S.L.T.V.)	Radio and Television
** Sudan (S.B.S. & S.T.V.)	Radio and Television
Uganda (Radio Uganda)	Radio

* Representation in Europe only

CARIBBEAN & WESTERN ATLANTIC

** Barbados (C.B.C.)	Radio and Television
** Jamaica (J.B.C.)	Radio and Television
** Trinidad & Tobago (T.T.T.)	Television
Virgin Islands (W.B.N.B. & W.B.N.B.-T.V.)	Radio and Television

MIDDLE EAST

** Federation of South Arabia (S.A.B.S. & S.A.T.V.)	Radio and Television

FAR EAST

** Hong Kong (Television Broadcasts Ltd.)	Television

tbrough its offices below:

T. I. E. (Sales) Ltd.

21 & 22 Sloane Street,
London, S.W. 1.
Tel. BELgravia 8541–9
Cables. Tietel London S.W.1.

3 East 54th Street,
New York 22, N.Y.
Tel. HA 1-7730
Cables. Tiestates

Rate Cards, Programme Schedules and fullest Station information are available from any one of the T. I. E. offices. *Our executives will be pleased to discuss the various markets – all you need do is telephone or write.*

** **T. I. E. (Programmes) Ltd.** act as purchasing agents for the Television Services of these Stations and additionally the Gibraltar Broadcasting Corporation, Pakistan Television and Saudi Arabia Television and welcome any enquiries on programmes for existing or projected Television Services.

NEWS IN ENGLISH *in the Foreign Services of shortwave stations*

Abbreviations see page 68: [1] = Sun only; [2] = Sat only; [3] = Tues, Thurs, Sat; [4] = Mon–Fri; [5] = Mon only; [6] = Tues–Sat; [7] = Mon, Wed, Fri; [8] = W. only; [9] = Fri only; [10] = Mon Wed, Sat; [11] = Tues, Thurs, Sun; [12] = Fri & Sun.

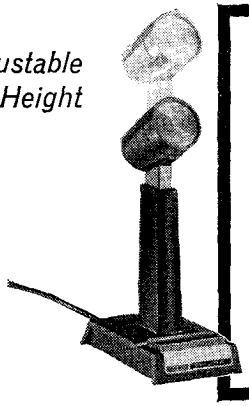
00.00 AFRTS
Albania
BBC
Japan
Moscow
Norway[5]
Peking
R. New York
Sofia
VOA
00.15 R. Australia
00.20 R. Nederland[8]
00.22 SABC
00.30 Budapest
Kiev[11]
SABC
Sweden
Bonaire
00.45 Cambodia[1]
New Zealand
Pakistan
01.00 AFRTS
AIR
Japan
Moscow
Peking
Prague
RBI
Rome
RNE
CBC
Cuba
VOA
01.15 SBC
01.22 SABC
01.30 R. Australia
Bucharest
Budapest
Cairo
FEBC
R. Nederland[8]
SABC
01.32 DW
01.45 Denmark[8]
02.00 AFRTS
BBC
CBC[8]
Cambodia
Japan
Lisbon
Moscow
Peking
RNE
Sweden
VOA
02.22 SABC
02.30 R. Australia
Lebanon
Moscow
RBI
SABC
02.50 BCC
02.55 FEBC[1]
03.00 AFRTS
BBC
Bucharest
Budapest
Cuba
Ghana
Japan
Lisbon
Moscow
Peking
RNE
Seoul
VOA
03.02 *Argentina*
DW
03.20 BCC
03.22 SABC
03.30 Bonaire
CBC[1]
Cuba
Ghana
Moscow
Prague
Sweden
03.45 R. Australia
Cambodia
RBI
04.00 AFRTS
R. Australia
Albania
BBC
CBC
FEBC
Japan
Lisbon
Moscow
Norway[5]
Peking
Pyongyang
Sofia
VOA
04.15 SABC[8]
04.25 R. Thailand
04.30 *Bucharest*
Budapest
Ghana
Kiev[11]
Moscow
Pakistan
SABC[8]
VOA
04.32 DW
04.45 R. Australia
RBI
Moscow
04.47 DW
KGEI[4]
05.00 AFRTS
R. Australia
BBC
CBC
Japan
Moscow
SABC[8]
SBC
Seoul
VOA
05.15 Brazzaville
SABC[8]
Sweden
05.30 BBC
ETLF
Ghana
05.45 BBC
Cambodia
UN Radio[6]
05.47 DW
06.00 AFRTS
R. Australia
BBC
CBC
ELWA
Ghana
Japan
Moscow
VOA
06.02 Argentina
DW
06.15 RBI
Brazzaville
Moscow
06.22 UN[6]
06.30 Albania
06.30 Cairo
Cuba
Japan
Seoul
VOA
UN Radio[6]
06.45 SABC[8]
07.00 AFRTS
R. Australia
BBC
CBC
ELWA
Japan
Moscow
New Zealand
Prague
SBC
VOA
07.15 Ghana
07.20 Ceylon
07.30 Lisbon
R. Nederland[8]
Warsaw
07.31 CBC
07.45 Denmark[8]
08.00 AFRTS
Japan
Norway[5]
Pyongyang
08.15 Lisbon
08.30 CBC
Pakistan
Peking
Seoul
Warsaw
08.45 R. Australia
08.47 DW
09.00 AFRTS
R. Australia
FEBC
Japan
Pakistan
SBC
Sweden
VOA
09.15 BBC
09.30 Japan
Peking
09.35 Ceylon
10.00 AFRTS
AIR
R. Australia
Hanoi
Japan
Moscow
New Zealand
VOA
UN Radio[6]
10.15 Denmark[2]
10.30 Seoul
R. Thailand
10.47 DW
11.00 AFRTS
R. Australia
BBC
Brazzaville
CBC
ELWA
FEBC
Japan
Moscow
Pyongyang
SBC
Sweden
VOA
11.02 DW
11.15 Pakistan
RRI
11.15 SABC
11.30 BBC
Malaysia
Moscow
11.45 FEBC
4VEH[1]
12.00 AFRTS
R. Australia
CBC
Japan
Moscow
Norway[1]
Peking
Prague
RBI
R. New York
Tashkent
Warsaw
VOA
4VEH[8]
12.02 DW
12.05 Bonaire
12.15 CBC
RBI
12.30 Moscow
Sweden
12.45 Denmark[8]
RBI
Cambodia
12.55 FEBC
13.00 AFRTS
R. Australia
BBC
Brazzaville
Cairo
Hanoi
Japan
Peking
Paris
R. New York
SBC
Warsaw
VOA
13.15 RBI
13.30 ETLF
Ghana
Moscow
13.31 AIR
13.35 Pakistan
FEBC
13.45 ETLF
13·55 Japan
14.00 AFRTS
R. Australia
BBC
Ghana
Japan
Norway[1]
Peking
Prague[1]
Pyongyang
R. New York
Sweden
Tashkent
VOA
14.02 HCJB
14.15 Ankara
Lisbon
RBI
14.20 Mongolia
14.30 Japan
Lisbon[8]
R. Nederland[8]
14.45 RRI
Denmark[8]
14.55 AIR
15.00 AFRTS
15.00 R. Australia
15.00 Albania
Bucharest
Ghana
Moscow
Nigeria
Japan
Peking
R. New York
SBC
VOA
15.16 CBC
15.30 Belgrade
FEBC
Hanoi
Moscow
Prague
Seoul
15.52 DW
16.00 AFRTS
R. Australia
BBC
Ghana
Japan
Moscow
Norway[1]
Peking
RBI
R. New York
SABC
Sweden
VOA
16.15 Japan
Syria
16.30 ETLF
16.32 CBC
16.45 Ghana
16.47 DW
16.52 SABC
17.00 AFRTS
R. Australia
ELWA
ETLF
Ghana
Japan
Nigeria
Peking
R. New York
SABC
VOA
17.15 BBC
17.30 Moscow
Prague
RBI
17.45 Cairo
17.47 DW
17.52 SABC
18.00 AFRTS
AIR
R. Australia
BBC
BCC
Cuba
ETLF
Japan
Norway[1]
R. New York
UN[4]
VOA
18.15 Ghana
Lisbon
18.30 Abidjan
BCC
Belgrade
Lebanon
Moscow
UN[4]
Warsaw
18.33 CBC
18.40 Senegal
18.45 SBC
Tanzania
19.00 AFRTS
AIR
R. Australia
ETLF
Japan
Kabul
Kiev[10]
Moscow
R. Nederland[8]
Pakistan
Prague
Pyongyang
R. New York
Warsaw
Sweden
VOA
19.05 Sofia
19.15 Brazzaville
Denmark[8]
RBI
RRI
19.30 Bagdad
Bucharest
Budapest
Cairo
Moscow
Peking
Sofia
Warsaw
20.00 AFRTS
AIR
Albania
R. Australia
BBC
Ghana
Iran
Japan
Moscow
R. Nederland[9]
Norway[1]
Pakistan
R. New York
VOA
20.10 Cuba
20.15 Lisbon
Sweden
20.17 RBI
20.20 RNE
Rome
20.30 Moscow
Peking
Warsaw
Lisbon
Cairo
Ghana
20.50 Cuba
20.52 DW
21.00 AFRTS
AIR
R. Australia
BBC
CBC
Ghana
Japan
Moscow
R. Nederland[8]
Nigeria
R. New York
SABC
Seoul
VOA
21.05 Sofia
Israel
21.12 DW
21.15 Rome

Continued page 83

At last! A quality microphone designed **specifically** for the ham. Incorporates features galore that hams have asked for. Tops in voice punch and intelligibility . . . and abounding in convenience features to minimize operator fatigue. Great for AM & FM transmission, unsurpassed for SSB. Check these outstanding ham-oriented features:

- "Shaped" response—cuts off sharply above 3000 and below 300 cps with a rising characteristic to the curve: gets the message through with top audio punch!
- Push-to-talk bar-switch with optional locking feature to control relay and mike muting circuits.
- Separate slide-switch gives choice of press-to-talk or VOX operation.
- Exclusive adjustable height stand for fatigue-free operation.
- Rugged Shure Controlled Magnetic element (U.S. Patent 2,454,425).
- Field replaceable cartridge and cable.
- ARMO-DUR case and stand—can't rust, peel, crack, or dent. Always comfortable to the touch.
- Shock proof.

Adjustable Height



ALL NEW **SHURE**

PRICED BELOW WHAT YOU WOULD EXPECT TO PAY

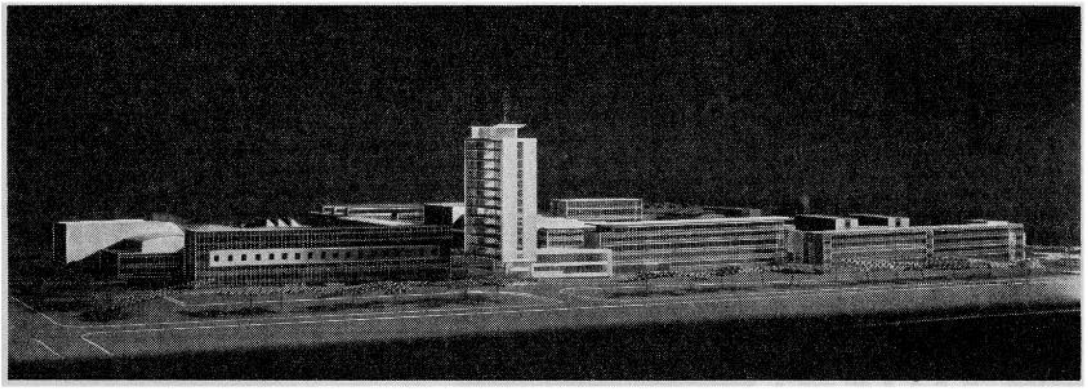
444

HAM MICROPHONE

For literature write to: **Export Department**

SHURE BROTHERS, INC., 222 Hartrey Ave., Evanston, Ill., U.S.A.

MICROPHONES, HIGH FIDELITY AND ELECTRONIC COMPONENTS



POLSKIE RADIO I TELEWIZJA

BROADCASTS NEWS, MUSIC, FEATURE PROGRAMMES ON LONG, MEDIUM AND SHORT WAVES

FULL INFORMATION SEE POLAND

DX-CLUBS OF THE WORLD

AUSTRALIA: Australian Radio DX-Club, P.O. Box E 73, St. James, NSW (Publ: "Australian DX News") – **Branches: Victorian Branch:** 404 Mont Albert Rd, Surrey Hills, E. 10, Victoria. (Publ: "The Victorian DX Listener", monthly); Tasmania: 33 Hampden Rd, Battery Point, Hobart. **South Australian Branch:** 29 Park Terrace, Plympton Park, So. Australia. We. Australia: 108 Landsdown Rd, South Perth.

AUSTRIA: Radio Japan Club-Wien, Heiligenstädter-Strasse 11/5/13, A-1190 Vienna. (Publ: "Radio Japan" in German). **Vienna News Agency**, c/o K. H. Lindenthal, Vienna XIV, Hütteldorferstr. 173 (Publ: "The News").

BENELUX: Benelux DX-Club, Oude Amersfoortseweg 153, Hilversum, Holland, (Publ: "Benelux DX-Club" in Dutch and English).

CANADA: R. Canada Shortwave Club, c/o CBC, International Sce, P.O. Box 6000, Montreal – **Canadian Aero-Space Club**, 3225, Longfellow Avenue, Windsor, Ontario, Canada (Publ: "Wings & Space") – **DX-Organization of Winnipeg**, 430 Inlester Blvd, Winnipeg, Manitoba – **Intercontinental DX Club**, 77 Porchester Drive, Scarborough, Ontario. (Publ: "HI", bimonthly).

American SWL Club, P.O. Box 218, Crystal Beach, Ontario. Business address, 16182 Ballad Lane, Huntington Beach, Cal: 92647, U.S.A. – **Trans National DX League** (Americas Division), 174 Waterloo St, Saint John, N.B. – **Westcoast DX Club**, 644 Baker St, Victoria, B.C. (Publ: Bulletin twice monthly).

CEYLON: Ceylonese Shortwave Listeners' Club, Galle Walauwa, Kollamuane, Piliyandala.

DENMARK: The Danish Short Wave Club International, P.O. Box 102 Vejlby-Risskov (Publ: "Shortwave News" in E and "Kortbølge Nyt" in D) – **The Cimbrer DX-Club**, Box 27, Aars. (Publ: "The Cimbrer DX-News").

ECUADOR: HCJB-Club, La Voz de los Andes, Cas. 691, Quito.

FINLAND: Finlands Svenska DX-Förbund, Kungsgatan 11, Ekenäs (Publ: "Frekvensnytt" distributed to all affiliated clubs) – ***Esbo-DX Klubb**, Morby, Esbo – **Finlands DX-Club r.f**, Box 10214, Helsinki 10 (Publ: "Attention" in Swedish) – **Finlands DX-Club International**, Box 10214, Helsinki (Publ: "Attention B" in English) – ***Jakobstads DX-Club r.f**, c/o Eriksson, Storgatan 11, Jakobstad – ***Nykarleby Radio Club r.f**, Nykarleby – **Suomen DX-Kuuntelijat r.y**, P.O. Box 10454, Helsinki 10 (Publ: "DX-Kuuntelija") – ***Västra Nylands DX-Club r.f**, Kungsgatan 11, Ekenäs – * = affiliated with Finlands Svenska DX-Förbund.

FRANCE: France DX-TV Club (Amateur club for long distance TV reception), 30 rue Jean Moulin, 33 Villenave d'Ornon (Gironde).

GERMANY: Radio Canada Shortwave Club 305 Wunstorf/Hann, Sudetenstr. 34 – **Radio Japan Club** (Publ: "RJC-Mitteilungen"). Branches as follows: Berlin: Berlin 42, Forddamm 47 – Hamburg: 200 Hamburg 19, Grädenerstr. 5 – Munich: 8 München 22, P.O. Box 134 – Kl. Aachener Runde: 51 Aachen, Robenstr. 44. – 305 – Wunstorf – Hannover: Barnestr. 74.

HUNGARY: Radio Budapest Shortwave Club, c/o Brody Sandor s.u. 5–7, Budapest VIII.

ITALY: Radio Club "Carsi", P. Colombo 26, Carsi Ligure, Genova.

JAPAN: Japanese Short Wave Club, C. P.O. Box 29, Sendai (Publ: "SW-DX Guide") – **Chunichi Radio Listeners Club**, C.P.O. Box 347 Nagoya (Publ: "CRL Dayori") – **Radio Nederland & Deutsche Welle Listener Club**, P.O. Box 16 Itami, Hyogo-ken.

KOREA: Korean Short Wave Club, c/o R.J.K. Khan, 3-4 Hoo Am Dong, Seoul.

MALTA: National Radio Club, 35 St. Anthony Street, Balzan.

NEW ZEALAND: New Zealand DX Radio Association, 78 District Rd, Green Island, Dunedin (Publ: "Tune In") – **New Zealand Radio DX League**, P.O. Box 1356, Christchurch (Publ: "New Zealand DX-Times").

NIGERIA: R. Nigeria Listeners Club, 45 Martins Str, Lagos

GREETINGS FROM

RADIO ★ PRAHA

RADIO PRAGUE

Broadcasting daily in English, Arabic, Czech, Slovak, French, German, Italian, Portuguese, Spanish and Swahili – programmes of world news and views, reports from Czechoslovakia, music.

Programmes also include answers to listeners, musical requests and regular columns for radioamateurs, DXers, and stamp collectors.

FOR DETAILS WRITE TO:

RADIO PRAGUE – PRAGUE 2 – CZECHOSLOVAKIA

See editoral text page 88

PORTUGAL: Radio Portugal DX-Club, Rua São Marcal 1-A, Lisbon (Publ: Newsheets).

NORWAY: DX-Listeners Club, P.O. Box 1284 V, Oslo 1. (Publ: DX-News). Local branches at Oslo, Grimstad, Halden, Drammen, Hamar, Kristiansand, Tønsberg, Egersund, Bergen, Trondheim and Mysen.

SOUTH AFRICA: South African DX-Club, P.O. Box 48, Umtata (Publ: DX-Monitor). All club correspondance to: 6A St. Augustines Rd, West End, Kimberley.

SWEDEN: Affiliated with 1) DX-Alliansen, 2) member of Sveriges DX-Förbund.

DX-Alliansen (National Union of Swedish Clubs), Box 3108, Stockholm 3 (Publ: "Allians Nytt" in Swedish and "Allians News" in English) – **Sveriges DX-Förbund** (a union of clubs), Landskrona (Publ: "Eter-Aktuellt" for all affiliated clubs).

1) **Arctic Radio Club,** Box 3013, Växjö 3 MW–DX only (Publ: "MW-eko") – 2) **Bjuv Radio Klubb,** Headal 314, Bjuv – 1)2) **Bodens DX-Club,** Box 127, Boden (Publ: DX-kuriren) – 1)2) **Bureå DX-Klubb,** Box 387, Bureå – 1)2) **Burträsk DX-Club,** Box 222, Burträsk – 1)2) **Dala-Husby DX-Klubb,** Smedby, Dala-Husby – 1) **DX-Cirkeln i Stockholm,** Bjursätragatan 95, Bandhagen – 1)2) **DX-Club 57,** Box 203, Nässjö – 1)2) **DX-Club 63,** c/o Tegnér, Box 144, Vimmerby – 1) **DX-Club Tellus,** Götgatan 16, Söderhamn – 2) **DX-Club Örnen,** Box 512, Sollentuna 2 – 1) **DX-Klubben Electron,** Box 2066, Eskilstuna – 1)2) **DX-Klubben KMB,** Box 423, Nyvång – 2) **DX-Klubben Trio,** c/o Forsblad, Bäckebo, Längjum – **DX-klubben Vargen,** Box 84, Näs – **Fagersta DX-Klubb,** Mistelvägen 8, Fagersta – 1)2) **Falkens DX-Club,** Box 5, Klintehamn – **Folkunga DX-Club,** Stora Torget 5, Linköping – 1)2) **Fyris Radio Club,** Box 2020, Uppsala 2 – **Gothenburg DX-Club International,** Box 31004, Göteborg 31 (Publ: "GDX-aren") – 1) **Göteborgs DX-Club,** Box 31004, Göteborg 31 (Publ: "GDX-aren") – **Göteborgs Fritidsbyrås DX-Sektion (GFDX),** Box 5134, Göteborg 5 (Publ: "DX-tips") – 1) **Halmstads Kortvågsklubb,** Fack 15, Halmstad – 1)2) **Husum Radioklubb,** Box 199, Husum – **Hörby DX-Club,** Torggatan 21, Hörby – 1) **IOGT DX-Club,** Vasagatan 9, Stockholm C (Publ: "Accent") – 1)2) **Kalix Radioklubb,** Box 79, Kalix – 1)2) **Kiruna Kortvågsklubb,** Box 208, Kiruna C – 1) **Kopparbergs Radioklubb,** Box 979A, Kopparberg – 1)2) **Källö Radioklubb,** Källö-Knipplan – 1)2) **Luleå Radioklubb,** DX-sektionen, Fack 37, Bergnäset – **Lysekils DX-Club,** Norra Kvarnsgatan 24, Lysekil – 1)2) **Malmö Kortvågsklubb,** Fack 7026, Malmö 7 – 1)2) **Mora DX-Club,** Kråkebersvägen 101, Mora – 1) **Mälardalens Radiosällskap,** c/o Quistbergh, Konstgjutarvägen 50, Johanneshov (Publ: "QRG-bulletinen") – 1) **Oskar-Fredriksborgs DX-klubb,** UB 16, Oskar-Fredriksborg – 1) **Oskarshamns Radioklubb,** Gunnarsövägen 4, Oskarshamn – **Radio Communications DX-Club,** Fack 3, Kopparberg PTP-DX only (Publ: "From Point to Point") – 1)2) **Radio Klubben Micro,** Box 3054, Hälsingborg 3 (Publ: "RCM-bulletinen") – 1) **Radioklubben Universal,** Box 2053, Huddinge 2 – 2) **Radix DX-Club,** Parkgatan 29, Kungshamn – 2) **Rågsveds DX-Klubb,** Vallhornsgatan 28[1], Stockholm-Bandhagen – 2) **Skellefteå DX-Club,** Box 1100, Byske – 2) **Snapphanens DX-Klubb,** Gethornskroken 15B, Hässleholm – 1) **Skövde Radio Club,** Fack, Skövde 1 – 1)2) **Sundets DX-Club,** Landskrona – 1)2) **Svalans DX-Club,** Bankogårdsgatan 47, Hälsingborg – **Sundbybergs Radioklubb,** Box 48, Sundbyberg – 1) **Sveriges Kortvågsförening,** Box 2311, Göteborg 2 (Publ: "Etergnistan") – 1) **Sveriges Radioklubb,** Box 5083, Stockholm 5 (Publ: "DX-radio") – 1) **Teknik för Allas Eterklubb,** Box 3137, Stockholm 3 (Publ: "Teknik för Alla") – 1) **The DX-Companions,** Box 35, Hällestad – 1)2) **Umeå Kortvågsklubb,** Box 117, Umeå 1 – 1) **Västra Aros Lyssnarklubb,** Box 165, Västerås – **Västerbergslagens Radioklubb,** Olsjön, Box 522, Saxdalen – **Väst Sveriges DX-förbund,** Box 31004, Göteborg 31 – 1) **Vox Kortvågsklubb,** Box 12062, Norrköping 12 – 1) **Wermlands Radio Union,** Box 25, Karlskoga (Publ: "WRU-information") – 1) **Radioklubben Snaran, Öregrundsgatan 11/772,** Stockholm NO – **DX-Alliansens Vänner** c/o Jan Erik Räf, Box 2053, Huddinge 2 (Supporting DX-Alliansen) (Publ: "Allians Nytt").

SWITZERLAND: Schweizer DX Club, Schürenstr. 3, 8903, Birmensdorf/ZH (Publ: "Hemel Hempstead Radio") – **Swiss SW Club,** Schaffhauserstr. 102, 8057 Zürich. (Publ: Swiss SW News).

UNITED KINGDOM: International Short Wave Club, 100 Adams Garden Estate, London, S.E. 16, England (Publ: "International Short Wave Radio") – **International Short Wave League,** 60 White Street Derby, England (Publ: "Monitor") – **Pathfinder Radio Group,** 13 Little Rd, Hemel Hempstead (Publ: "APF DXer") (Associated clubs: DX-Union-Europa, Hempel Hempstead Amateur Radio Club) – **Ripon Radio Club,** Tranby Croft, Glasshouses, Harrogate, Yorks – **World Communications Club of Gt. Britain,** 26 Tolhouse St, Gt. Yarmouth, Norfolk (Publ: "Contact"). *(Continued page 82)*

BROADCASTS IN ENGLISH TO NORTH AMERICA

Prepared by Roger Legge, Etlan, Virginia U.S.A.

TO EASTERN NORTH AMERICA

Morning Broadcasts

EST	GMT	Station	kc
7.00 AM	12.00	Copenhagen, Denmark	15165
7.15 AM	12.15	Helsinki, Finland (Tues, Sat)	15185
		Melbourne, Australia	9580 or 11710
		Montreal, Canada	5970, 15365
7.30 AM	12.30	Bonaire, Neth. Ant.	11820
9.00 AM	14.00	Oslo, Norway (Sun)	15175
		Prague, Czechoslov. (Sun)	15285, 15448, 17825
		Quito, Ecuador	15115, 17890
		Stockholm, Sweden	17840
10.30 AM	15.30	London, England	15260

Afternoon Broadcasts

3.00 PM	20.00	Accra, Ghana	9760, 11800
4.00 PM	21.00	Hilversum, Holland	6085, 9590
4.15 PM	21.15	London, England	9510, 11780

Evening Broadcasts

5.00 PM	22.00	London, England	6195, 7130, 9510, 11780
		Moscow, USSR	7150, 7205, 7310, 9665
		Oslo, Norway (Sun)	9610
6.00 PM	23.00	London, England	6195, 7130, 9510
		Moscow, USSR	7205, 7290, 7310, 9665
6.30 PM	23.30	Johannesburg, So. Africa	9675, 11880
6.45 PM	23.45	Tokyo, Japan	11780, 15135
7.00 PM	00.00	London, England	6195, 7130, 9510
		Moscow, USSR	7205, 7310, 9665
		Peking, China	15060, 17680
		Sofia, Bulgaria	6070
		Tirana, Albania	7265
7.30 PM	00.30	Budapest, Hungary	6235, 9833
		Johannesburg, So. Africa	9675, 11880
		Kiev, USSR (Mon/Thurs/Fri)	7120, 7310, 9665
7.50 PM	00.50	Vatican	5985, 7250, 9645
8.00 PM	01.00	Berlin, Germany	5960, 6160, 9730
		Copenhagen, Denmark	9520
		Havana, Cuba	6170, 11760
		London, England	6195, 7130, 9510
		Madrid, Spain	6130, 9760
		Melbourne, Australia	15220, 17840
		Moscow, USSR	7150, 7205, 7310, 9665
		Peking, China	11945, 15060
		Prague, Czechoslov.	5930, 7115, 7345, 9550, 11990
		Rome, Italy	6010, 9630
8 15 PM	01.15	Berne, Switzerland	5965, 6120, 9535
8.30 PM	01.30	Bucharest, Rumania	5990, 9570
		Budapest, Hungary	6235, 9833
		Cairo, U.A.R.	9475
		Hilversum, Holland	9590 (Bonaire relay)
		Johannesburg, So. Africa	9675, 11900
9.00 PM	02.00	Stockholm, Sweden	5990
		Havana, Cuba	6170, 11760
		Lisbon, Portugal	6025, 6185
		London, England	6195, 7130, 9510
		Madrid, Spain	6130, 9760
		Moscow, USSR	7150, 7205, 7310, 9665
		Peking, China	11945, 15060
		Quito, Ecuador	9745, 11915, 15115
9.30 PM	02.30	Beirut, Lebanon	9710
		Berlin, Germany	5960, 6160, 9730
		Johannesburg, So. Africa	9675, 11900
10.00 PM	03.00	Bucharest, Rumania	5990, 9570
		Budapest, Hungary	6235, 9833
		B. Aires, Argentina (Mon–Fri)	9690
		Havana, Cuba	6135, 6170, 11760
		Lisbon, Portugal	5975
		Madrid, Spain	6130, 9760
		Moscow, USSR	7150, 7310, 9665
		Quito, Ecuador	9745, 11915, 15115
10.30 PM	03.30	Accra, Ghana	6110
		Bonaire, Neth. Antilles	9605
		Prague, Czechoslov.	6095, 7115, 7345, 9550, 11990
11.00 PM	04.00	Havana, Cuba	6135, 6170, 11760
		Moscow, USSR	7150, 7310, 9665
		Quito, Ecuador	9745, 11915, 15115
		Sofia, Bulgaria	6070
11.30 PM	04.30	Bucharest, Rumania	5990, 9570
		Budapest, Hungary	6235, 9833
		Kiev, USSR	7310, 9665
12.00Mdt.	05.00	Havana, Cuba	6135, 6170, 11760
		Moscow, USSR	7150, 7310, 9665

TO WESTERN NORTH AMERICA

PST	GMT	Station	kc
7.30 AM	15.10	Cologne, Germany	9675, 11925, 15405
6.00 PM	02.00	Melbourne, Australia	15220, 17840
		Tokyo, Japan	15135, 15235, 17825
6.50 PM	02.50	Taipei, China	11825, 11860, 15345
7.00 PM	03.00	Moscow, USSR (via Khab.)	9540, 11755, 15140
		Peking, China	9457, 11820, 15095
		Seoul, Korea	15125
7.30 PM	03.30	Stockholm, Sweden	5990
7.45 PM	03.45	Berlin, Germany	5955, 9560
8.00 PM	04.00	Moscow, USSR (via Khab.)	9540, 11755, 15140
8.15 PM	04.15	Berne, Switzerland	5965
8.45 PM	04.45	Berlin, Germany	5955, 9560
9.00 PM	05.00	Cologne, Germany	6145, 9735
		Moscow, USSR (via Khab.)	9540, 9640, 11755
10.00 PM	06.00	B. Aires, Arg. (Mon–Fri)	9690
		Moscow, USSR (via Khab.)	9540, 9640, 11755
10.30 PM	06.30	Havana, Cuba	6100
11.00 PM	07.00	Moscow, USSR (via Khab.)	9540, 9640, 11755, 11850

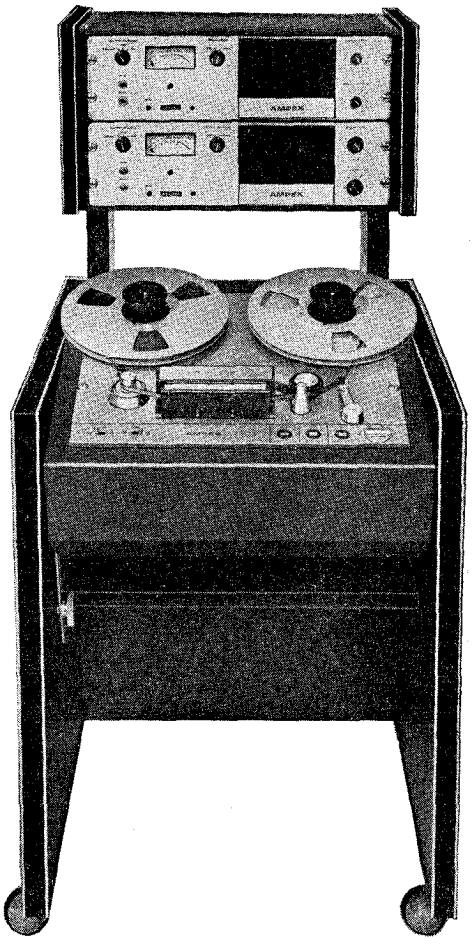
BROADCASTS IN ENGLISH TO OCEANIA

*AET = Australian Eastern Time – Add 2 hrs for New Zealand time.

*AET	GMT	Station	kc
06.45	20.45	New Delhi, India	9915, 11930
07.00	21.00	London, England	9410, 11820, 12095
07.10	21.10	Cologne, Germany	7290, 9685
07.30	21.30	Moscow, USSR	6050, 7185, 9540
08.00	22.00	London, England	9410, 11820, 12095
		New Delhi, India	9915, 11930
		Vatican	9675, 11740
16.00	06.00	London, England	6110, 7150, 9510, 9640, 11955
17.00	07.00	London, England	6110, 7150, 9510, 9640, 11955
		Prague, Czecholov.	15285, 21450
		Quito, Ecuador	6050, 9745, 11915
		Wellington, N.Z.	9620, 11780
17.30	07.30	Hilversum, Holland	9525, 9715, 11730
		Lisbon, Portugal	17890, 21495
		Warsaw, Poland	9675, 11840, 15275
18.00	08.00	London, England	7150, 9640, 11955
		Quito, Ecuador	6050, 9745, 11915
18.30	08.30	Montreal, Canada	5970, 9625
		Peking, China	9457, 11600, 15060
		Warsaw, Poland	9675, 11840, 15275
18.45	08.45	Cologne, Germany	11925, 15275, 17845
19.00	09.00	Berne, Switzerland	15305, 17800, 21520
		London, England	11750, 15070, 17790
		Manila (FEBC), Philipp.	11855
		Quito (HCJB), Ecuador	6050, 9745, 11915
		Washington, U.S.A.	5985, 9665, 15365
19.30	09.30	Peking, China	9457, 11600, 15060
20.00	10.00	London, England	11750, 15070, 17790
		New Delhi, India	15165, 17705
		Washington, U.S.A.	5985, 9665, 15365
		Wellington, N.Z.	9620, 11780
21.00	11.00	Djakarta, Indonesia	9865, 11770
		London, England	11750, 15070, 17790
		Washington, U.S.A.	5985, 9665, 15365
21.30	11.30	Moscow, USSR	6050, 7280, 9540
		Taipei, China	11825
		Vatican	11705, 15240
22.00	12.00	Washington, U.S.A.	5985, 9665, 15365
22.30	12.30	Moscow, USSR	6050, 7280, 9540
23.30	13.30	Moscow, USSR	6050, 7280, 9540

Continued page 82

Since 1954 the Ampex 350 series has been the best recorder in its field



Now we've improved on it. Meet the Universal AG-350 with solid state electronics

For 12 years the 350 series set the world standard. 18,000 were bought, many have logged over 90,000 hours apiece. Now we've improved on it further.

The new Universal AG-350 has added solid state electronics, new features, new operating convenience to the 350's proven performance and reliability.

Solid State Electronics—The same know-how that researched transistors for sophisticated computers has been utilised for the electronics in the Universal AG-350. 100% solid state circuits give optimum capability and reliabilty.

Precision Tape Transport—In most recorders, performance deteriorates with age and wear on the mechanism. The Universal AG-350 is precision built for really heavy duty. It has a longer top-performance life, and any slight fall-off of quality is easily adjusted to bring it back to original specifications.

Head Assembly—The Universal AG-350 uses Ampex Professional Audio head assemblies. Other good heads live for maybe 10,000 hours. Ampex head assemblies are as good as new for 15,000 hours and more. Some Ampex Professional Audio heads are performing to original specifications after 36,000 hours. This is the performance you can expect.

There are 25 variations on the basic Universal AG-350, a choice of $3\frac{3}{4}$-$7\frac{1}{2}$ or $7\frac{1}{2}$-15 ips. All recorders in the AG-350 series operate on virtually any standard line voltages without the need for external step-down transformers.

AMPEX

Ampex sales and service facilities are conveniently located throughout Europe and the Middle East. For more information write to: Ampex Great Britain Ltd., Acre Road, Reading, Berkshire, England. Telephone: Reading 84411. Ampex S.A., Via Berna 2, Lugano, Switzerland. Telephone: 091/3-81-12. Ampex Europa G.m.b.H., 6 Frankfurt/Main, Düsseldorfer Strasse 24, Germany. Telephone: 252001-5. Ampex, 41 Avenue Bosquet, Paris 7e, France. Telephone: 705-38-10.

Broadcasts in English

Continued from page 80

BROADCASTS IN ENGLISH TO EAST ASIA

*JST=Japanese Standard Time)

*JST	GMT	Station	kc
06.00	21.00	*Melbourne*, Australia	15240, 17715
06.10	21.10	Cologne, Germany	7290, 9685
06.30	21.30	Ulan Bator, Mongolia	9540, 11850
07.00	22.00	Melbourne, Australia	15240, 17715
		Washington, U.S.A.	7255, 9580, 11965
07.05	22.05	Rome, Italy	6010, 9710
07.45	22.45	New Delhi, India	7200, 9615
		Stockholm, Sweden	7270
08.00	23.00	London, England	6010, 7120, 9625, 11955
		Melbourne, Australia	15240
		Washington, U.S.A.	9580, 11920, 11965
16.00	07.00	Berne, Switzerland	9670, 11775, 15320
		Copenhagen, Denmark	15165
17.30	08.30	Karachi, Pakistan	17947, 21590
		Manila (FEBC), Philipp.	9715
17.45	08.45	Cologne, Germany	11925, 15275, 17845
18.00	09.00	London, England	11955, 15435, 17880
		Melbourne, Australia	11810
		Washington, U.S.A.	7165, 11735, 11845
19.00	10.00	London, England	11955, 15435
		New Delhi, India	15105, 17855, 21615
		Washington, U.S.A.	7165, 11735, 11845
20.00	11.00	London, England	11955, 15435
		Melbourne, Australia	9580, 11810
		Stockholm, Sweden	9705
		Washington, U.S.A.	7165, 11735, 11845
20.45	11.45	Manila (FEBC), Philipp.	11920
21.00	12.00	London, England	11955, 15435
		Melbourne, Australia	9580, 11810
		Washington, U.S.A.	7165, 11735, 11845
12.30	12.30	Stockholm, Sweden	21690
22.00	13.00	London, England	11955, 15435
		Washington, U.S.A.	7165, 11735
23.00	14.00	Washington, U.S.A.	5975, 7165, 11735
23.20	14.20	Ulan Bator, Mongolia	9540, 11850
00.00	15.00	Washington, U.S.A.	5975, 7165, 11735

Broadcasts in English to Africa & South Asia available free-of-charge on separate sheet.

DX-CLUBS OF THE WORLD *(Continued from page 79)*

USA: Association of North American Radio Clubs, c/o Gerry L. Dexter, 904 Jefferson, Apartment 8, West Bend, Wisconsin (Publ: newsletters) – **American SWL's Club**: 16182 Ballad Lane, Huntington Beach, Calif. 92647. **DX-Internationale Communications Assoc, Ltd.**, 91 Court St, Newton, Mass (Publ: "DXI") – **International Radio Club of America**: P.O. Box 112, Englewood, Colorado 80110 (Publ: DX-Monitor") – **National Radio Club**, P.O. Box 223, Kittaming, Pa. 16201 (Publ: "DX-News") – **Newark News Radio Club**, 215 Market St, Newark, N.J. 07101 (Publ: "NNRC Bulletin") – **North American Shortwave Association**, 1503 Fifth Avenue Altoona, Pa. 16602 (An all-SWBC club w/"Frendx" bulletin published every month. The **only all-SWBC club in North America – Radio New York Worldwide Listeners Club**, Radio New York Worldwide, New York, N.Y. 10022 (Publ: The Bulletin, monthly). All mail to Irwin Belofsky Pres. Listeners Club – **Worldwide Monitors Radio Club**, 4834 Old York Rd, Philadelphia, Pa. 19141 (Publ: "DX-ers Digest").

WEST INDIES:
West Indian DXers Association, 21 Richmond Street, Port of Spain, Trinidad & Tobago (Publ: "Association Bulletin").

★ *Sveriges DX-förbund* är en sammanslutning av flertalet svenska DX-klubbar. Varje månad utges *Eter-Aktuellt*, en riktig, tryckt DX-tidning med bl. a. *nybörjarsidor, Special-DX-sidor från* Latin-America, Asien och Africa, tipssidor både för nybörjare och avancerade, QSL-nytt, stationspresentationer, samt naturligtvis senaste nytt från alla områden inom DX-hobbyn.
Sänd ett 45-öres frimärke för ett provnummer och alla upplysningar till: Sveriges DX-förbund, Box 19008, Malmö 19.
★ DX-ers outside Scandinavia are invited to join the INTERNATIONAL DX-CLUB OF SWEDEN — a link between dx-ers all over the world and the Top-quality Swedish DX-magazine *Eter-Aktuellt*. Sample copy, and all informations about IDXCS, against 1 IRC. Write to: IDXCS, Landskrona, Sweden.

WORLD PUBLICATIONS present

We offer you a new international broadcasting tape:

LATIN AMERICA ... IN 45 MINUTES.

Many of the Latin American stations are rather difficulty to receive owing to the small powers used, fading, interference etc. One has to wait until midnight local time to start receiving those weak signals. But this is what makes this listening so fascinating. Some of the stations, particularly those in Brazil, are quite easy to pick up and broadcast very attractive music.

The Identification problem for thousands of listeners interested in listening to Latin America has now been solved by the production of a

LATIN AMERICAN IDENTIFICATION TAPE,

which contains programmes, announcements, identification signals and typical local music from about 40 Latin American stations. When you listen to this unique tape, you will notice a big difference in style and rhythm of the local music from country to country.

This Latin American tape is produced in close co-operation with the stations and organizations, which *have shown great interest by recording the tapes in* their own studios.

We have endeavoured ourselves to make the contributions as instructive and entertaining as possible. This unique tape will give you a lively impression of Latin American broadcasting and music - and at the same time help you to identify the stations.

The recordings are original and therefore free from noise and interference.

To each tape belongs a complete list of the contents. We call this tape BIT2.

You know perhaps BIT1 which contains 27 European, 12 African, 16 Eastern and Pacific stations as well as 10 leading No. American stations.

These tapes help to open the World for you and your family and bring you an understanding of how big, how versatile the population of this world is.

Both BIT1 and 2 are available and are recorded on high quality mylar tape, 2 track mono, speed 3¾" (9.5 cm) per second and will therefore fit practically any tape recorder.

The price incl. transport for each of them is: Da.Kr. 39.50, US $ 6.00, £ 2/0/0, DM 24.00, Sw.Kr. 30.00. — Airmail transport extra Da.Kr. 13.00, US $ 2.00, £ 0/14/0.

By order of both BIT1 and BIT2 we offer you 10 % in discount. We send you our brochures by request.

Obtainable from your bookseller or direct from

WORLD PUBLICATIONS

Lindorfsallé 1, Hellerup, Denmark
Telephone: Hellerup 3808 - Cable: World Publications, *Hellerup, Denmark*

MORE INFORMATION on page 139 and 195

DX-PROGRAMMES

All prgr's in English except where indicated.
AUSTRALIA: R. Australia: Sat 19.30, 22.00, Sun 05.00, 07.30(April–Oct), 09.00, 13.00, 15.30, Mon 02.45. **Japanese:** "DX-Time" Sun 10.45 - R. St. 3NE: Sun 12.35 "World At Your Fingertips" conducted by Bob Padula, Australian Radio DX Club.
BULGARIA: R. Sofia: Fri 19.30, 21.30, Sat 00.00, 04.00. **German:** 1st & 3rd Sun 20.00. **French:** 1st Sun 21.00. **Spanish:** 2nd Thurs of the month at 22.30, Fri 00.00.
CANADA: Canadian Broadcasting Corporation: "R. Canada Shortwave Club" Sat 12.35, 18.35, 21.30, 23.20; Sun 07.50. **French:** Sat 19.50, 20.35. **German:** Sun 18.00, 18.45. **Polish:** Sat 17.00, Sun 15.30. **Czech:** Sun (fortnightly) 14.45, 17.15. **Hungarian:** Sat 18.15. **Russian:** Tues (fortnightly) 14.15, Thurs (fortnightly) 16.00. **Spanish:** Thurs 00.30. **Portuguese:** Sat 23.43.
CZECHOSLOVAKIA: R. Prague: Wed 19.00, 23.05. To No. America: Thurs (fortnightly) 01.00, 03.30. To Far East/Australia: 2nd Thurs 07.00. For Monitor Clubs: 4th Thurs 07.00. **In German:** 1st Thurs 19.00, repeated following Thurs 08.00. For Austria: 3rd Sun 09.30, repeated following Tues 17.05.
DENMARK: Voice of Denmark: "DX-Bulletin": Tues 08.05, 13.05, 15.05, 19.35. Wed 02.05.
ECUADOR: R. St. HCJB: "DX-Party Line": 1st & 3rd Mon/Tues of the month 21.00, 02.30, 1st & 3rd Wed of the month 09.30.
FINLAND: Finnish Broadcasting Co: Fri 16.00, 21.00, Sat 12.15 (presented by Finlands DX-Club).
GERMANY: "Deutsche Welle": 2nd Mon/Tues 09.15, 15.20, 18.30, 19.45, 22.30, 01.00, 02.30, 04.15, 05.30.
Radio Berlin International: Sat 12.20, 14.30. Mon (fortnightly) in all English tr's to Africa; **Swedish:** Sat 17.00, 19.45.
HAITI: R. 4VEH: "DX-Corner" Fri 12.15.
HOLLAND: R. Nederland Wereldomroep: "DX Jukebox" Thurs 07.42, 14.42, 19.12, 20.12, 21.12, 21.42, Fri 01.42.
HUNGARY: R. Budapest: Tues/Wed 19.30, 00.30, 03.00; Sat/Sun (repeats) 22.00, 23.30, 01.30, 04.30. **German:** 2nd & 4th Sun 09.00.
JAPAN: R. Japan: Sat 00.30*, 02.45*, 10.15*; Sun 12.20**, 14.15**, 14.50**, 16.35**, 18.20** (*Listeners Corner including DX-News compiled by the Japanese Short Wave Club weekly; **Listeners Corner weekly, but DX-News on the 3rd Sun of the month only).
KOREA (Rep): KBS: Thurs 03.15, 05.15, 06.45, 10.45, 15.45, 21.15.
MONACO: Norea Radio via Trans World Radio: "Oss lyttere imellom" in Norwegian every last Fri of the month 17.00 (produced by DX-Listeners Club, Norway).
NETHERLANDS ANTILLES: Trans World Radio: "DX Special": Sun 03.35, Fri 12.05, 21.00.
NEW ZEALAND: R. New Zealand: "Arthur Cushens DX-World": 1st Wed 06.45, 10.30 and following Sat 23.45.
POLAND: Polskie Radio: 2nd Fri 18.30 and following Mon 21.30. **Swedish:** Thurs 17.30. **Danish:** Wed Fortnightly 16.30, 19.30.
PORTUGAL: Emissora Nacional: "DX-Club" 2nd & 4th Fri/Sat 07.45, 08.30, 14.00, 18.30, 20.30, 23.00, 02.15, 03.15, 04.00. **German:** 1st & 3rd Fri 22.00, 23.45. **French:** 1st & 3rd Thurs 17.45, 19.45, 22.15.
RUMANIA: R. Bucharest: Wed & Fri 19.30, 22.30; Thurs & Sat 01.30, 03.00.
SO. AFRICA: R. South Africa: Thurs 21.42, 22.42; Fri 00.12, 01.12, 02.12, 03.12, 16.42, 17.42.
SWEDEN: R. Sweden: Tues 09.20, 11.20, 12.50, 14.20, 16.20, 19.20, 20.35, 23.05, 23.50, Wed 00.50, 02.20, 03.50, 05.35. **French:** Tues 09.50, 15.20, 18.20, 21.05, Wed 03.20, 06.05. **German:** Wed 10.40, 17.40, 23.10. **Spanish:** Thurs 21.50, Fri 00.20, 01.50. **Portuguese:** Every other Thurs/Fri 22.10, 00.40, 02.10.
SWITZERLAND: SBC European & Overseas Service: "Swiss Short Wave Merry-Go-Round": Sat/Sun (in all English tr's): 07.45, 09.45, 11.45, 13.45, 15.45, 19.30, 02.00, 05.45.
USA: "R. New York Worldwide": Sat 23.07, Sun 16.07.
USSR: R. Kiev: "DX-Club": Last Mon/Tues of the month at 19.00, 22.30, 00.30, 04.30.

Religious Broadcasting Organisations

(Continued from page 66)

Christian Broadcasting Association, 420 Lyons Rd, Five Dock, Sydney, N.S.W., Australia. Man. Dir: Rev. V. Turner. Radio prgr. production on behalf of Protestant Churches.
Pacific Broadc. Ass., CPO Box 1000, Tokyo, Japan – **Chmn. of Board of Dir's:** A. Hatori. Gen. Dir: A. Seely. Mgr: B. Holritz.
National Council of Churches Broadc. Network (N.C.C.B.N), Philippines: Dumaguete City. Mgr: B. Magdamo. Operates st's DYSR/DYCR/DYH4/DYB4, Manila. Ag. Mgr: W. Matthews. Operates st's DZCH-AM/DZCH-FM.
South East Asia Radio Voice (SEARV), Manila, Philippines. Director: C. Bernardez (50kW tr's at Bulacan) will begin operation around April 1st 1967.
Broadcasting and Audio Visual Aids Committee of the East Asia Christian Conference
(BAVACO), 4–13, Shibuya 4-Chome, Shibuya-Ku, Tokyo, Japan – Secr: M. S. Ogawa.
Audio Visual Evangelism Comittee, (auxiliary committee of the Hong Kong Christian Council of Churches). Providing Visual Aids and Broadc. Studio services for the related churches. 191 Prince Edward Road, Room 401, Kowloon/Hong Kong. Exec. Dir: Rev. Thomas W. Lung.
EPI: Emetteur Protestant International (international evangelical radio station) P.O. Box 1374 – 3000 Berne, Switzerland. Planned: 1 sw.st. with 2 × 250kW tr's with prgr's in English, French, German, Spanish, Portuguese, Scandinavian & Dutch. Pub: EPI News Bulletin (Quarterly) in 7 languages.

NEWS in English *(from page 76)*

21.30 Mongolia	22.00 Japan	23.00 BBC
Moscow	Moscow	Hanoi
R. Nederland[8]	Norway[1]	Japan
Peking	RBI	Malaysia
Sofia	R. New York	Moscow
Warsaw	SABC	RBI
21.37 CBC	Warsaw	R. New York
21.45 Cairo	VOA	VOA
R. Australia	22.05 Rome	23.01 CBC
21.47 DW	22.30 BBC	23.02 Argentina
21.52 SABC	Bucharest	23.03 Warsaw
22.00 AFRTS	Moscow	23.30 R. Australia
AIR	Vilnius[12]	Budapest
Albania	Warsaw	FEBC
Algeria	22.35 KGEI*	SABC
Ankara	22.45 R. Australia	Sweden
BBC	Sweden	23.32 HCJB
Belgrade	22.52 SABC	23.45 Cambodia[8]
Budapest	23.00 AFRTS	Japan
CBC	AIR	*=Tues, Thurs.
Ghana		

RADIO-CANADA SHORTWAVE CLUB is on the air weekly to Europe, Africa, the Caribbean, the Americas, Australia, New Zealand and the Islands of the Pacific at the times given below. The program runs for approximately 10 min.s and can be heard in the following languages:

ENGLISH: Sat. to Europe (1) at 1235 in the 19 m.b. To Africa at 1835 in 13, 16, 19 and 25 m.b's. To Europe (2) at 2130 in 19, 25 and 31 m.b's. To the Caribbean and the Americas at 1235 in the 25 and 49 m.b's, at 2320 in the 19, 25, 31 and 49 m.b's. Sun. to Australia at 0750 in the 31 and 49 m.b's. All English-language programs of Club follow program FOCUS.

FRENCH: »Allo DX«: Sat. to Africa at 1950 in 16, 19 and 25 m.b's. To Europe at 2035 in the 19, 25 and 31 m.b's.

GERMAN: »Radio Kanada Kurzwellenklub«: Sun. at 1800 in the 13, 16, 19 and 25 m.b's. Also at 1845 on VHF Berlin 90.2 Mc and in the 31 and 41 or 49 and 75 m.b's.

POLISH: Sat. at 1700 in the 13, 16, 19 and 25 m.b's. Sun. at 1530 in the 13, 16, 19 and 25 m.b's.

CZECH: Every second Sun. at 1445, 1715 in the 13, 16, 19 and 25 m.b's.

HUNGARIAN: Sat. at 1815 in the 13, 16, 19 and 25 m.b's.

RUSSIAN: Every second Tues. at 1415 in the 13, 16, 19 and 25 m.b's. Every second Thurs. at 1600 in the 13, 16, 19 and 25 m.b's.

SPANISH: Every Thurs. at 0030 in the 19, 25, 31 and 49 m.b's.

PORTUGUESE: Every Sat. at 2343 in the 19, 25, 31 and 49 m.b's.

Broadcast times indicated are approximate.

EUROPE
1:20 Mill.
KM
100 0 100 200 300 400 500
ICELAND
HÖFN
AKUREYRI
ICELAND
KEFLAVIK
REYKJAVIK
EIDAR
TROMSÖ
FINMARK
MURMANSK
KALNISPÄÄ
ARKHANGELSK
White Sea
SAMMALTUNTURI
TAIVALKOSKI
NARVIK
PYHÄTUNTURI
PELLO
KIRUNA
ROVANIEMI
BODÖ
LULEA
OULU
KAJAANI
YLIVIESKA
KOLI
JOENSUU
FINLAND
KOKKOLA
KUOPIO
PETROSAVODSK
PIETARSAARI
IVANOVO
UMEA
SAVONLINNA
VAASA
MIKKELI
ÖRNSKÖLDSVIK
ÄHTÄRI
IMATRA
SOVIET
NAMSOS
ÖSTERSUND
KRISTIINA
LAHTI
LENINGRAD
TRONDELAG
SUNDSVALL
PORI
TAMPERE
HELSINKI
HUDIKSVAL
TURKU
SWEDEN
MOSCOW
VIGRA
GÄVLE
TALLIN
NORWAY
FALUN
TARTU
THORSHAVN
UPPSALA
HAMAR
OSLO
STOCKHOLM
VALMIERA
BERGEN
ÖREBRO
NORRKÖPING
MADONA
FREDRIKSTAD
KULDIGA
RIGA
SMOLENSK
PORSGRUNN
MOTALA
VISBY
UNION
STAVANGER
BORÅS
MOGHILEV
GÖTEBORG
KALMAR
KAUNAS
VILNIUS
KURSK
KRISTIANSSAND
HALMSTAD
KARLSKRONA
MINSK
GOMEL
DENMARK
BURGHEAD
ÄLBORG
HALSINGBORG
HÖRBY
Baltic Sea
CHARKOV
SCOTLAND
SKIVE
COPENHAGEN
MALMÖ
KALININGRAD
BARANOVITJI
DUNDEE
North Sea
ESBJERG
KALUNDBORG
GDAŃSK
KIEV
REDMOSS
TÖNDER
TORUŃ
DNJEPROPETROVSK
WESTERGLEN
EDINBURGH
FLENSBURG
WARSZAWA
GLASGOW
STAGSHAW
SZCZECIN
BELFAST
NEWCASTLE
BREMERHAVEN
KIEL
SCHWERIN
LISNAGARVEY
BARROW
HAMBURG
POZNAŃ
ŁÓDŹ
VINNITSA
ATHLONE
PENMON
MOORSIDE
BREMEN
BERLIN
POLAND
HOOGEZAND
WROCŁAW
LVOV
TJERNOVTSY
DUBLIN
GREAT BRITAIN
HOLLAND
DRESDEN
KATOWICE
KRAKÓW
KICHINEV
ODESSA
IRELAND
POSTWICK
LEIPZIG
KOŠICE
TIRASPOL
DROITWICH
DAVENTRY
HILVERSUM
IAŞI
CORK
SWANSEA
CARDIFF
LONDON
GERMANY
PRAHA
CZECHO-SLOVAKIA
KÖLN
CLEVEDON
BEXHILL
BRUXELLES
BRNO
NYIREGYHAZA
WASHFORD
BRIGHTON
BELGIUM
BUDEJOVICE
BRATISLAVA
CLUJ
BACAU
PLYMOUTH
LUXEMBOURG
FRANKFURT
ORADEA
STALIN
REDRUTH
STARTPOINT
LILLE
SAARBRÜCKEN
WIEN
RUMANIA
LOUVETOT
STUTTGART
AUSTRIA
BUDAPEST
HUNGARY
TIMIŞOARA
BUCUREŞTI
ROUEN
PARIS
NANCY
STRASBOURG
MÜNCHEN
GRAZ
ALDRANS
KLAGENFURT
NOVI SAD
CRAIOVA
STALIN
BREST
QUIMPER
RENNES
DIJON
BERO MÜNSTER
ZAGREB
(VARNA)
ALLOUIS
SWITZERLAND
LJUBLJANA
BEOGRAD
BULGARIA
NANTES
FRANCE
TRIESTE
YUGOSLAVIA
STARA
ISTANBUL
POITIERS
SPITTENS
MONTE CENERI
PRISTINA
ZAGORA
LIMOGES
VENEZIA
SOFIA
CLERMONT FERRAND
LYON
SARAJEVO
TITOGRAD
COMOTINI
MILANO
SKOPLJE
Bay of Biscay
GRENOBLE
TORINO
GENOVA
BOLOGNA
DUBROVNIK
THESSALONIKI
BORDEAUX
NIMES
FIRENZE
SAN REMO
ANCONA
PESCARA
TIRANA
Aegean Sea
MONT PELLIER
MONTE CARLO
MARSEILLE
ITALY
ALBANIA
KORCA
TOULOUSE
VATICAN RADIO
ROMA
FOGGIA
BARI
VOLOS
GREECE
PAU
PERPIGNAN
Corsica
CORFU
LA CORUÑA
OVIEDO
BILBAO
SAN SEBASTIAN
ANDORRA
NAPOLI
ATHENS
PALENCIA
BURGOS
LERIDA
Ionian Sea
PATRAS
AMALIAS
SASSARI
PORTO
VALLADOLID
ZARAGOZA
BARCELONA
Sardinia
CHANIA
SALAMANCA
NUORO
MENORCA
CAGLIARI
PALERMO
MESSINA
MIRAMAR
MADRID
CUENCA
MALLORCA
CATANIA
Creta
COIMBRA
PORTUGAL
SPAIN
CALTANISSETA
PAREDE
CACERES
VALENCIA
Balearic Islands
Sicily
LISBOA
ALICANTE
The Mediterranean
Malta
HUELVA
BAZA
TUNIS
FARO
GRANADA
MICHELET
CONSTANTINE
BENGHAZI
SEVILLA
MALAGA
ALGERIA
ALGER
AFRICA
TRIPOLI
GIBRALTAR
TANGIER
ORAN
HAG 58

RADIO

EUROPE

ALBANIA (People's Rep. of)

L.T: GMT+1 h – Pr.L: Albanian.

RADIODIFFUSION ET TELEVISION ALBANAISE (Gov.)
ADDR: Rue Ismail Quemal, Tirana. Te: 4307. Cable: Albradio.
L.P: Dir: Th. Nano. Head, Foreign Rel. Dept: D. Nini.
HOME SERVICE: Tirana 1088kc 275.7m – Tirana 1358kc 221.0m. **D.PRGR:** On 1358kc: W 04.30–07.00, 11.00–22.00. Sun 05.00–22.00. On 1088kc: 11.00–15.00. **N:** 05.30, 06.30, 11.30, 13.00, 14.00, 15.30, 17.00, 18.00, 19.00, 21.00 – **Wrp:** 20.15.

FOREIGN SERVICE:

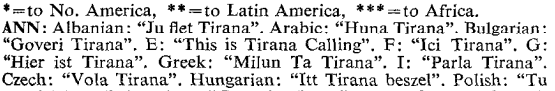
kc	m	kc	m	kc	m
1098	273.0	6157	48.75	9380	31.98
1358	220.9	7265	41.29	9390	31.95

Each tr. lasts 30 min's

Arabic	kc
03.30	1358, 7265, 9390
04.30	7265, 9390
17.00	1088
21.00	7265, 9390
Albanian	
00.30*	7265, 9390
Bulgarian	
05.00	1088, 6157
15.30	1088, 7265
19.00	1088, 9390
Czech	
05.00	9390, 7265
19.30	6157
English	
04.00***	1358, 7265, 9390
06.30	6157
15.00***	1088, 7265
20.00	7265, 9390
22.00	7265, 9390
00.00*	6157, 7265
French	
04.00***	1088, 6157
06.00	7265, 9390
16.30***	1088, 6157
17.30	6157
20.30	1088, 6157
German	
05.30	7265, 9390
17.00	6157
18.00	6157
22.00	1358, 1088, 6157

Greek	kc
04.30	1088, 6157
15.30	6157
18.30	6157
19.30	1088
Hungarian	
20.00	1088, 6157
21.00	1088, 6157
Italian	
06.00	1088, 6157
18.00	1088
21.30	1088, 6157
22.30	1088, 1358, 9390
Polish	
06.30	7265, 9390
18.30	7265, 9390
Russian	
03.00	9390, 6157, 1358
16.00	6157
19.30	7265, 9390
20.30	7265, 9390
Serbo-Croat	
05.30	1088, 6157
16.00	1088, 7265
17.30	1088
18.30	1088
Spanish	
02.15**	7265
19.00	7265
21.30	9390, 7265
22.45**	7265

*=to No. America, **=to Latin America, ***=to Africa.
ANN: Albanian: "Ju flet Tirana". Arabic: "Huna Tirana". Bulgarian: "Goveri Tirana". E: "This is Tirana Calling". F: "Ici Tirana". G: "Hier ist Tirana". Greek: "Milun Ta Tirana". I: "Parla Tirana". Czech: "Vola Tirana". Hungarian: "Itt Tirana beszel". Polish: "Tu mowi Tirana". Russian: "Govorit Tirana". Serbo-Croat: "Govori-Tirana". Sp: "Habla Tirana" – **INT-SIG:** 9 notes played on clarinet – V. by letter.



RADIO KUKËSI (Gov.) – **ADDR:** Drejtoria e Radio Kukesit, Kukes. **L.P:** Dir: X. Dobrosha – **HOME SCE:** Kukës 6660kc 45.04 m (varies up to 150kc in freq.) 0.2kW – **D.PRGR:** 13.00–14.30, 15.00–20.00.
ANN: "Ju flet Kukësi" – V. by letter. Re. in French.

RADIO SHKODRA (Gov.) – **ADDR:** Drejtoria e R. Shkodrës' Shkodër – **L.P:** Dir: A. Geno – **STATION:** Shkodër 8215kc 36.52m 0.2kW. 1300kc 231m 0.2kW – **HOME SCE:** D 05.00–06.30, 13.00–14.00, 16.30–20.00 – **ANN:** "Ju flet Shkodra" or "R. Shkodra" – V. by letter. Re. in German.

RADIO KORÇA – **ADDR:** Drejtoria e R. Korçes, Korçe – **L.P:** Dir: J. Mulo – **STATION:** 1349kc 222m 0.2kW – **HOME SCE:** 12.30–14.15, 16.30–20.00 – **ANN:** "Ju flet Korça".

RADIO GJIROKASTRA – **ADDR:** Drejtoria e R. Gjirokastres, Gjirokaster – **L.P:** Dir: N. Kokona – **STATION:** 1430kc 210m 0.2kW – **HOME SCE:** 13.00–14.30, 16.00–20.30 – **ANN:** "Ju flet R. Gjirokastra".

ANDORRA

L.T: GMT+1 h – Pr.L: French, Spanish, Catalan.

RADIO ANDORRA (Priv, Comm.)
ADDR: Direction: Obispo Catala 42, Barcelona 17, Spain. Te: 2397111. Cable: Rapro, Barcelona – Station: Roc des Anellettes, Andorre la Vieille, Principauté d'Andorre. Te: 100. Cable: Radio-andora – **L.P:** Dir. Gen: M. Degoy. Dir. Tec: J. L. Marquet. Dir. Prgr: G. Marquet. French Dept: J. Bonis. Spanish Dept: M. Pibernat. Catalan Dept: R. Calderon. Pub. Dept: M. Rodriquez. Listeners Sce: C. Ruiz.
STATIONS:
998kc 300.6m 400kW – 5995kc 50.04m 25kW.
HOME SCE: 05.00–24.00 on 998kc.
French: 05.00–13.00, 15.00–21.00. **Spanish, Catalan:** 13.00–15.00. **English/Spanish:** 21.00–24.00 – **Music & N:** W 11.00 – **Boite Postale No. 1** (dedicated records): Sun 07.30, 20.00.
ANN: F: "Ici R. Andorre". Sp: "Aqui R. Andorra, emisora del Principado de Andorra, Roc de las Anelletas, Andorra la Vieja Principado de Andorra".
INTERNATIONAL SCE:
L.P: Dir. Gen: M. Degoy. Dir. Tec: P. Cousse. Dir. Prgr: A. Rossel. Pub. Dept: C. Valencia. Listeners Sce: J. Tellez. Superv: A. Piffaré. Dir. Prgr: J. M. Mas. **D.PRGR:** 21.00–24.00 on 5995kc. Int. Prgr. for Europe (relay mw-prgr.).
ANN: F: "Ici R. Andorre International". E: "This is R. Andorra International". Sp: "Aqui R. Andorra Internacional, Emisora del Principado de Andorra. G: "Hier ist R. Andorra" – **INT-SIG:** Gong low. Open and close down "Hymne national Andorran" – V. by QSL-card or letter. Rp. Recordings accepted – **PUB:** Prgr.schedule (weekly) illustrated sheet "Aqui Andorra" (monthly).

SUD-RADIO (Comm.)
ADDR: P.O. Box 7, Andorra-la-Vielle. **Cable:** Radioval. **Te:** 7.
STATIONS: 818kc 366.8m 300kW – **FM:** 98.9Mc 0.05kW.
HOME SCE: French: 05.45–13.00, 15.00–21.00, 21.05–23.00 – **Spanish/French:** 13.15–15.00 – **Catalan:** 13.00–13.15, 21.00–21.05.
ANN: F: "Ici Sud-Radio" – **INT-SIG:** Xylophone – V, by QSL card and letter. **Rp-PUB:** Prgr. schedule (weekly).

AUSTRIA

L.T: GMT+1 h – Pr.L: German.

ÖSTERREICHISCHER RUNDFUNK (Gesellschaft m.b.H.)
ADDR: Osterreichischer Rundfunk, Wien IV, Argentinierstr. 30a. Te: 656661. Cable: Rundfunk Wien – **L.P:** Dir. Gen. Adm: J. Scheidl. Vice Dir. Gen, Dir. Tec: Dipl. Ing. W. Füchsl. Dir. Prgr: Prof. Dr. A. Übelhör.
STUDIOS: R. Graz, Zusertalgasse 14a, Graz III. **Cable:** Radio Graz. P. Goritschnig – **R. Klagenfurt:** Sponheimerstr. 13, Klagenfurt. **Cable:** Radio Klagenfurt. Prof. P. Goritschnig – **R. Linz:** Obere Donaulände 1, Linz. **Cable:** Radio Linz. A. Schwetz – **R. Salzburg:** Franziskaner-gasse 5, Salzburg. **Cable:** Radio Salzburg. Prof. Dr. P. Becker – **R. Tirol:** Landhaus Neubau, Innsbruck. **Cable:** Radio Tirol. IIR. Dr. J. Scheidle – **R. Vorarlberg:** Neues Rathaus, Dornbirn. **Cable:** Radio Vorarlberg. Dr. W. Tölzer – **R. Wien:** Argentinierstr. 30a, Wien IV. **Cable:** Radio Wien. Dr. E. Glasser, H. Hasslinger.

HOME SERVICE
FIRST PRGR: W 04.30–22.00(Sat 23.05). Sun 05.00–22.00.
Medium Waves:

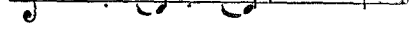
	kc	m	kW		kc	m	kW
Aldrans I	629	476.9	25	Salzburg I	773	388	1
Lauterach I	629	476.9	25	Linz	890	337.1	20
Lienz I	629	476.9	1	Graz	1394	215.2	25
Klagenfurt I	728	412.1	25	Wien I	1475	203.4	150

Low Power Mw's (0.05kW exc. where indicated).
566kc: Bad Ischl, Feistritz (0.1), Greifenburg, Mühlbach, Radstadt, Neukirchen – **674kc:** Aigen, Bischofshofen, Bleiburg, Gloggnitz, Neumarkt, Matrei, Ried, Radenthein – **773kc:** Bad St. Leonhard, Hermagor, Lend, Mariazell, Oberdrauburg, St. Michael/Lungau, Leoben (0.1), St. Gallenkirch, Mittersill, St. Anton – **1052kc:** Krems, Neunkirchen – **1124kc:** Bruck/Mur (0.1), Eisenerz, Hofgastein, Imst, Kufstein*(0.015), Mayrhofen, Tamsweg, Gmünd, Mürzzuschlag (0.1),

Villach (0.1), Obervellach, Rottenmann, Obdach – **1313kc:** Kindberg, Ehrwald, Friesach, Haslach, Knittelfeld (0.1), Liezen, Völkermarkt, Wolfsberg, Murau, Otz, Trieben, Kötschach (0.1), Mariapfarr, Hallstatt, St. Gallen, Rauris – **1394kc:** Admont, Bludenz, Spittal/Drau (0.2), Zell/See (0.2), Eisenkappel, Oberwölz, Neuberg, Längenfeld, Hopfgarten, Bad Goisern, Zell am Ziller, Achenkirch, Gmünd, Nauders, Scharnitz – **1457kc:** Amstetten, Schruns, Wr. Neustadt, Judenburg (0.1), Pfunds – **1475kc:** Saalfelden, Schwarzach, Windischgarten, Wörgl – **1484kc:** St. Pölten (0.2) – **1493kc:** Kitzbühel, Landeck, Reutte, Unzmarkt – **1546kc:** Abtenau, Bad Ausse, Scheifling, Sillian, Grossarl – **1594kc:** Braunau, Feldkirchen, Zwettl – *=operated by Postal adm.

FM:	ch	Mc	kW	FM:	ch	Mc	kW
Dobratsch I	11	90.4	0.15	Reitherkogel I	26	94.9	0.01
Sonnwendst. I	11	90.4	2.5	Steinkamperl I	26	94.7	0.01
Jauerling I	15	91.4	50	Lichtenberg I	27	95.2	100
Hahnbaum I	16	91.8	0.1	Gundkopf I	27	95.1	0.1
Stubnerkogel I	17	92.1	0.1	Schöckl I	28	95.4	50
H. Kaibling I	17	92.0	4	Rauchkofel	30	95.9	1
Patscherkofel I	18	92.5	50	Gemeindealpe I	31	96.2	0.05
Königsberg	20	93.1	0.03	Schmittenhöhe	32	96.6	0.04
Gschwandkopf	21	93.3	0.1	Plackles I	35	97.6	0.01
Pfänder I	21	93.3	50	Hartberg I	33	96.8	0.01
Salberg I	21	93.4	0.03	Burgstall I	33	96.8	0.01
Luxkogel I	23	93.9	0.2	Pyramidenkogel I	36	97.8	10
Koralpe I	25	94.5	0.1	Kahlenberg I	36	97.9	50
Gaisberg I	26	94.8	100	Kaunertal	36	97.8	0.04
				Mugel I	39	98.7	20

N: W 04.45, 05.45, 06.45, 09.00, 11.30, 15.45, 19.00, 21.00. Sun 05.00 (from Prgr. II), 05.45, 07.00, 08.00, 11.30, 16.00, 19.00, 21.00 – **"Blick in die Welt":** D 21.10.
Slovenian: (Klagenfurt only): Sun 06.30–07.00, Mon–Fri 13.15–13.55 (Mon also 17.00–17.15), Sat 08.00–09.00, 17.25–17.45 (fortnightly).
ANN: "Hier ist der Osterreichische Rundfunk, Erstes Programm, von Radio... (name of studio) hören Sie..." – **INT-SIG:** Extract from ballet-music from "Rosamunde" by Franz Schubert.



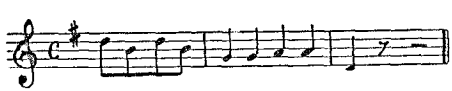
SECOND PRGR: W 04.30–23.05. Sun 05.00–23.05.

Medium Waves:	kc	m	kW		kc	m	kW
Aldrans II	520	576.9	10	Wien II	584	513.7	150
Lienz II	520	576.9	10	Dobl	1025	292.7	100
Liezen II	520	576.9	10	Kronstorf	1025	292.7	100
Klagenfurt II	584	513.7	25	Lauterach II	1025	292.7	10
Salzburg II	584	513.7	10	Mariapfarr II	1025	292.7	5

Low power M.W: (0.05kW): **520kc:** Bludenz, Murau – **584kc:** Mayrhofen – **944kc:** Unzmarkt – **962kc:** Ehrwald, Neukirchen, Neumarkt, Eisenerz, Gmünd – **1025kc:** Hermagor, Ötz I, Kitzbühel, Eisenkappel, Mühlbach, Achenkirch, Scharnitz, Zell am Ziller – **1052kc:** Hopfgärten, Längenfeld, Bad Goisern, Gmünd (Nö), Oberwölz, Spittal, Pfunds – **1142kc:** Aussee 2, Landeck 2, Reutte 2, Saalfelden 2, Abtenau, Scheifling 2, Neuberg, Kötschach, St. Gallen – **1562kc:** Obdach.

FM:	ch	Mc	kW		ch	Mc	kW
Mugel II	2	87.6	20	Plackles II	24	94.2	0.01
Königsberg	2	87.6	0.03	H. Kaibling II	31	96.3	4
Gschwandkopf	2	87.7	0.1	Stubnerkogel II	31	96.3	0.1
Schöckl II	7	89.2	50	Patscherkofel II	31	96.4	15
Rauchkofel	8	89.4	1	Koralpe II	32	96.7	0.1
Hartberg II	13	90.8	0.01	Jauerling II	33	97.0	50
Gaisberg II	13	90.8	100	Hahnbaum	34	97.2	0.1
Gundkopf II	15	91.4	0.1	Lichtenberg II	35	97.5	100
Reitherkogel II	15	91.5	0.01	Pfänder II	37	98.2	50
Kahlenberg II	16	91.9	15	Salberg III	38	98.5	0.03
Schmittenhöhe	18	92.4	0.04	Burgstall III	39	98.8	0.01
GemeindealpeIII	19	92.8	0.05	Steinkamperl III	41	99.4	0.01
Dobratsch	23	93.8	0.15	Luxkogel III	42	99.7	0.2

N, Wrp: W 05.00, 06.00, 07.00, 09.55, 12.00, 14.00, 16.00, 18.00, 21.00, 22.00, 23.00, Sun 05.00, 06.00, 07.00, 12.00, 16.00, 18.00, 21.00, 22.00, 23.00.
"Eine Woche Weltgeschehen": Sun 18.10 – **L.L: English:** Fri 20.40–20.55 – **Esperanto:** Tues 16.50.
ANN: "Hier ist der Osterreichische Rundfunk, Zweites Programm, von Radio... (name of studio) hören Sie..." – **INT-SIG:** Extract from Opera "Die Zauberflöte" by W. A. Mozart.



THIRD PRGR: 16.10–23.00 (test); Other times relay 2nd prgr.

FM:	ch	Mc	kW		ch	Mc	kW
*Hahnbaum III	4	88.2	0.1	*Schöckl III	14	91.2	50
*SonnwendsteinII	4	88.2	2.5	Burgstall II	16	91.8	0.01
*Patscherkofel III	5	88.5	50	PyramidenkogelII	19	92.8	10
Stubnerkogel III	5	88.5	0.1	*H. Kaibling III	24	94.3	4
Hartberg III		88.6	0.01	Steinkamperl II	34	97.2	0.01
*SchmittenhöheIII	6	88.8	0.04	Königsberg	38	98.5	0.03
*Lichtenberg III	6	88.8	100	*Gaisberg III	40	99.0	100
*Jauerling III	8	89.4	50	*Gundkopf III	40	99.0	0.1
Luxkogel II	9	89.6	0.2	*ReitherkogelIII	40	99.1	0.1
*Mugel III	9	89.7	20	Rauchkofel	41	99.3	1
*Pfänder III	9	89.7	50	Koralpe III	42	99.5	0.1
*Gschwandkopf	9	89.8	0.1	*Plackles III	42	99.6	0.01
Gemeindealpe II	13	90.8	0.05	*Kahlenberg III	43	99.9	50
Salberg II	14	91.1	0.05	Dobratsch III	44	100.3	0.15

*=Stereo-Testprgr: W 08.00(Sat 07.20)–10.00, D 17.10–19.00.

PUB: "Radio Österreich", weekly. Prgr. sched. four times a year; "Aus dem Programme" – free on request – **FI:** By licence payments & adv – **AD:** Prgr I: 67 min's per day; Prgr II: 49 min's per day; Prgr III: 80 min's per day.

SHORT WAVES: 100/20/10/4/1 kW.
Stations: A=*Aldrans* 1kW (11.27E/47.15N) – M=*Moosbrunn* 2× 100kW (16.28E/48.00N) – K=Kronstorf 4 kW (14.27E/48.10N) – F=*Fleckendorf* 20kW (14.18E/48.12N) – D=Deutsch-Altenburg 10kW (16.55E/48.06N).

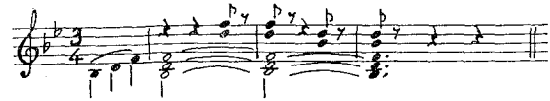
kc	m	kc	m	kc	m	kc	m
6000	50.00	9770	30.71	15210	19.72	17800	16.85
6155	48.74	11760	25.51	15410	19.47	17855	16.80
7245	41.41	11785	25.46	15430	19.44		
9525	31.50	11895	25.22	17730	16.92		
9610	31.22	11900	25.21	17750	16.90		

Areas: I=Europe; II=Europe/N.East; III=No. Africa/N.East; IV=No. America (East); V=Ce. America; VI=So. America; VII=So. Africa; VIII=N.East; IX=India/Indonesia; X=Australia/NZ; XI=Japan.

Schedule 6/11-66–5/3-67

Areas	Times	kc	St	Areas	Times	kc	St
I	04.30–23.00	6000	A		02.00–04.00	9770	F
	05.00–09.00	6155	M		23.00–24.00	6155	D
	09.00–11.00	6155	K		23.00–24.00	9770	M[1]
	17.00–19.00	6155	K	V	00.00–02.00	15430	M[2]
	19.00–22.00	6155	M	VI	00.00–02.00	9525	F
II	05.00–08.00	7245	M		02.00–03.00	9525	M[1][3]
	08.00–09.00	7245	K		03.00–04.00	11760	M[1]
	09.00–11.00	7245	M		19.00–21.00	15210	M
	11.00–13.00	7245	K	VII	08.00–10.00	17855	M
	18.00–19.00	7245	M		16.00–18.00	17750	M
	19.00–20.00	7245	K	VIII	06.00–09.00	15410	F
	05.00–08.00	9770	K		11.00–14.00	11900	D*
	11.00–15.00	9770	M		17.00–19.00	9610	M
	15.00–17.00	9770	K	IX	04.00–05.00	17855	M[4]
III	13.00–15.00	11785	K		14.00–16.00	17800	M
	15.00–17.00	11785	M	X	10.00–12.00	17750	M
IV	00.00–04.30	6155	D	XI	12.00–14.00	11895	M[1][5]
	00.00–02.00	9770	M	* Sun only.			

SCHEDULE 5/3-67–7/5-67: equal to above schedule with following alterations: 1) delete details – 2) add 23.00–24.00 15430kc M – 3) add 02.00–04.00 11760kc M, 23.00–24.00 15Mc M – 4) add 05.00–06.00 17855kc M – 5) add 12.00–14.00 15Mc M.
ANN: "Hier ist der Kurzwellendienst des Osterreichischen Rundfunks" – **INT-SIG:** "An der schönen blauen Donau" Waltz by Joh. Strauss.



V: Letters and Recordings of reports on reception will be appreciated to: *Austrian Radio*, SW-service, P.O. Box 700A – 1040 *Vienna*. Report sheets available. Prgr. schedule four times a year free on request.

AZORES (Portuguese)

L.T: GMT–2 h (Su: –1 h) – **Pr.L:** Portuguese.
EMISSOR REGIONAL DOS ACORES (Gov.)
ADDR: Av. Gasper Fructuoso, Ponta Delgada, S. Miguel. **Te:** 22624.
STATIONS: CSA97 4865kc 61.66m 1kW – 836kc 358.9m 1kW.
HOME SCE: 14.00–15.00, 20.00–24.00 – **N:** 14.30, 22.30.
ANN: "Aqui Portugal, Ponta Delgada, Emissor Reg. dos Açores da Emissora Nacional" – **INT-SIG:** *Chimes* – **V.** by letter or QSL-card.

R. CLUB DE ANGRA (Comm.)
ADDR: Rua Conselheiro Anastacio de Bettencourt, Angra do Heroismo, Ilha Terceira. Te: 219.
STATION: CSB80 1394kc 215.2m 1kW.
HOME SCE: W 08.00–11.00, 13.00–15.00, 19.00–24.00. Sat 08.00–11.00, 13.00–24.00. Sun 08.00–24.00. N: 09.45(W), 12.00(Sun), 14.00(W), 20.00, 22.45 – **ANN:** "Aqui estação CSB80 de R. Club de Angra (A Voz da Terceira)" – **INT-SIG:** Viola.
V. by letter. Recordings accepted.

EMISSORA DO CLUBE ASAS DO ATLANTICO (Comm.)
FI: By adv – **ADDR:** Aeroporto de Santa Maria. Te: 285. **Cable:** Asas Asmaria – **L.P:** Pres: C. Matos. Dir. Tec: A. Frazão.
HOME SCE: CSB81 1570kc 191m 1kW: W 12.00–16.00, 19.00–02.00. Sun 11.00–02.00. N: 13.00, 21.00, 22.00 – **Wrp:** 14.00, 16.00, 19.00, 02.00.
ANN: "Estacão Emissora do Clube Asas do Atlantico" – **V.** by QSL-card or letter – **INT-SIG:** Opens with music played on a Portuguese string instrument (Viola) and guitar.
ARMED FORCES RADIO & TV SCE: See USA.

BELGIUM

L.T: GMT+1 h – **Pr.L:** French, Dutch, German.
RADIODIFFUSION-TELEVISION BELGE (R.T.B.) – BELGISCHE RADIO EN TELEVISIE (Gov.)
ADDR: Place Eugène Flagey 18, Bruxelles 5. **Cable:** RTB or BRT. **Te:** 49.60.50.
L.P: Emissions francaises: Dir. Gen: R. Wangermée. Prgr. Dir: M. Hankard. Prgr. Dir. (TV): L. P. Kammans – **Nederlandse uitzendingen:** Dir. Gen: P. Vandenbussche. Prgr. Dir: C. Mertens. Prgr. Dir. (TV): B. Jansens – **Services Communs. Gemeenschappelijke diensten (common sce's):** Tec. Dir. Gen: F. Mortiaux. Chief Eng's: G. De Lafonteyne & E. Dekeyser. Adm. & Finance Dir. Gen: F. Hoosemans – **International Sce's:** Exec. Dir: F. Zoete. **German Prgr:** Head: Mrs. I. Janetzky – **Cultural Services (including Foreign Relations):** Dir: L. Wallenborn.

HOME SERVICE:

FRENCH NETWORK

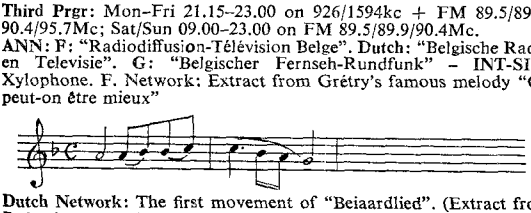
Bruxelles I (Nat.)	620 kc	483.9 m	150 kW	(Wavre)	
Bruxelles IV (Reg.)	1124 –	266.9 –	10 –	(Aye, Houdeng)*	
	1484 –	202.2 –	5 –	(Liège)*	
Anlier (Nat.)	87.6 Mc	10 kW	Bruxelles(3. prgr.)	96.1 Mc	2 kW
Houdeng(Reg.)	92.3 –	50 – *	Houdeng(3. prgr.)	96.6 –	50 –
Ougrée (Reg.)	90.5 –	50 – *	Liège (3. prgr.)	99.5 –	10 –
Anlier (Reg.)	91.5 –	10 – *	Anlier (3. prgr.)	94.1 –	10 –

* Prgr's from studios in Mons, Namur, Luxembourg, Liège.
FM-Ougrée: 88.5Mc 10kW German Prgrs.
620kc rel. on FM 87.6Mc: W 05.30–22.00(Sat 23.00). Sun 05.30–23.00. N, **Wrp:** 05.30, 06.00, 07.00, 08.00, 09.00, 11.00, 12.00, 13.00, 15.00, 16.00, 17.00, 18.30, 21.00, 21.55. Sat, Sun 22.55 – **Wrp:** 10.50.
1124kc rel. on FM 92.3, 90.5, 91.5Mc: 09.00–14.30, 17.00–22.00.
Symphony Concert: Tues 19.00–21.00.

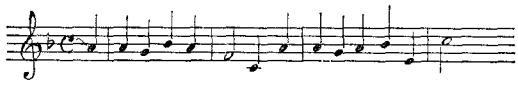
DUTCH NETWORK

Brussels II (Nat.)	926 kc	324.0 m	150 kW	(Wavre)		
Brussels III (Reg.)	1484 –	202.2 –	0.5 –	(Kortrijk)		
	1511 –	198.5 –	20 –	(Veltem)		
Bredene	1594 –	188.2 –	5 –			
FM	**Mc**	**kW**			**Mc**	**kW**
Aalter (Nat.)	95.7	10	Veltem	(3. prgr.)	89.5	50
Veltem* (Reg.)	93.7	50	Aalter	(3. prgr.)	90.4	10
Genk* (Reg.)	97.9	10	Genk	(3. prgr.)	89.9	10
Aalter* (Reg.)	98.6	50				

* Prgr's from studios in Kortrijk, Ghent, Hasselt, Antwerp.
926kc (rel. on FM 95.7Mc):
First Prgr: Sat/Sun 05.30–23.00 on 926kc + FM 95.7Mc (Aalter); also on 1594kc from 09.00; on 89.5/89.9Mc (Veltem/Genk) at 05.30–08.50; Mon–Fri 05.30–21.15 on 926/1594kc + FM 89.5/89.9Mc; also on 95.7Mc from 09.00. N, **Wrp:** 05.30, 06.00, 07.00, 08.00, 11.30, 12.00, 16.00, 18.00, 21.00, 21.55. Sat, Sun 22.00 – **Wrp:** 05.30, 07.00, 11.30.
Second Prgr: D 09.00–23.00 on 1484/1511kc + FM 93.7/98.6/97.9Mc. D 16.00–18.00 or 17.00–19.00 varied prgr. and N – **Symphony Concert:** Fri 19.00–21.00.
Third Prgr: Mon–Fri 21.15–23.00 on 926/1594kc + FM 89.5/89.9/90.4/95.7Mc; Sat/Sun 09.00–23.00 on FM 89.5/89.9/90.4Mc.
ANN: F: "Radiodiffusion-Télévision Belge". **Dutch:** "Belgische Radio en Televisie". G: "Belgischer Fernseh-Rundfunk" – **INT-SIG:** Xylophone. F. Network: Extract from Grétry's famous melody "Ou peut-on être mieux"



Dutch Network: The first movement of "Beiaardlied". (Extract from Ruben's cantata by Peter Benoit)



V. by QSL-card or letter. Recordings accepted.

INTERNATIONAL SERVICE
ADDR: Directions of Overseas Sce. of R.T.B./B.R.T., 18 Place Eugène Flagey, Brussels 5. **Cable:** RTB Mondial. Te: 496050 – **L.P:** Exec. Dir: F. Zoete. Heads Shortwave: J. Vandenbranden, M. Depré, J. Mertens. Transcription & Public Relations: M. Swaenepoel, W. Sanders.

STATIONS: ORU3/ORU4=100kW, ORU5=20kW (G.C: 04.34E/50.44N).

kc	m	kc	m	kc	m	kc	m
9615	31.20	11715	25.61	15335	19.56	17860	16.79
9740	30.80	11885	25.24	17820	16.84	21510	13.90
9745	30.78	11895	25.22	17845	16.81	21690	13.83

Abbreviations: A=French/Dutch; B=French/Dutch/Congolese; C=Congolese; I=Africa; II=No. America; III=So. America; IV=So. Europe; V=Far East – Freq's in fat types 100kW. Others 20kW.

Times		L	Area	kc
10.00–12.00		B	I	21Mc, **17860, 21510**
12.15–13.00	a	A	IV	11885
			V	**17Mc**
			I	**17860**
13.30–15.45	b (Sat)	C	I	15335, **17860, 21510**
13.30–16.30	b (Sun)	A	I	15335, **17860, 21510**
16.45–17.15	b (Sun)	A	I	9740, **11715, 17860**
16.00–17.15	(W)	C	I	9740, **11715, 17860**
17.15–18.30		C	I	9740
17.15–18.30		A	I	**11715, 17860**
18.30–21.00	c	A	I	9740, **11715, 17860**
21.15–23.00	d	A	III	**9615**, 9740, **11895**
23.15–01.00	d	A	II	**9615**, 9745, **11895**

a) for missionaries and seamen (alternatively in French and Dutch); b) Sat (Congolese), Sun (Sport, French/Dutch); c) for Belgians and Africans; d) for Belgian seamen and Belgians in the world, alternatively in French and Dutch.
N: French: 10.30, 11.30, 19.30, 20.00. **Dutch:** 10.15, 11.40, 19.00.
ANN: F: "Ici Bruxelles, Radiodiff-Television Belge, Emission Mondiales". Dutch: "Hier is Brussel, de Belgische Radio en Televisie Wereldomroep" – **SIGNALS:** Starting: Xylophone – **INT-SIG:** Gevaerts "Vers l'avenir". The signal at the start of each broadcast: "Ou peut-on être mieux" – Closing: Belgian National Anthem – **V.** by QSL-card. Recordings accepted.

BULGARIA (Peoples Rep. of)

L.T: GMT+2 h – **Pr.L:** Bulgarian.
BULGARIAN RADIO AND TELEVISION (Gov).
ADDR: Bulgarian Broadcasting at the Committee of Culture and Art, 4, Bd Dragan Tsankov, Sofia. Te: 7-10-44. **Cable:** Bulgarradio. **Telex:** 541 – **L.P:** Dir. Gen: Kr. Vassilev. Dir. B. Nonev. Dep. Dir: R. Kamensky. Dir. Tec: Zh. Zherkov. Head Foreign Rel: N. Petkov.

HOME SCE:

	kc	m	kW		kc	m	kW
Sofia I	593	506	200	Varna	1124	267	10
Plovdiv	746	402	30	Kardjali	1160	259	30
Stolnik	773	388	30	Stara Zagora	1223	245	30
Sofia II	827	362.7	100	Shumen	1295	232	30
Blagoevgrad	863	348	30	Sofia III	7670	39.11	15

1st prgr: 03.25–08.37 on 593/1124/1223kc, 08.37–09.55 on 593/827/7670kc, 09.55–14.55 on 593/827/1124/1223/7670kc, 14.55–20.30 on 593kc, 20.30–22.00 on 593/1124/1223kc – N: 03.30, 04.30, 06.00, 07.00, 08.00, 09.00, 10.30, 12.00, 13.00, 15.00, 16.00, 17.00, 18.30, 20.30, 21.50.
L.L: Russian Mon 16.30 – **Folklore Music:** Mostly at 04.00–06.00, 10.00–14.00, 16.00–18.00. **Symphony:** Tues, Thurs 17.30. **2nd prgr:** 07.00 (Sun 08.30)–20.30 on 827/1124/1223kc.

FOREIGN SERVICE
STATIONS: G.C: 23.20 E/42.40N.

kc	m	kW	kc	m	kW	kc	m	kW
827	362.7	100	6245	48.04	50	9817	30.56	50
1160	259.3	30	7255	41.35	50	11765	25.50	100
1295	232.0	30	7670	39.11	15	11970	25.06	50
5920	50.68	120	9560	31.38	50	15312	19.59	50
6070	49.42	100	9700	30.93	120	17800	16.85	50

Schedule October 66–April 67

TO EUROPE/NEAR EAST

Arabic	kc		
04.00–04.30	827, 5920, 7670, 9560	04.30–05.30a	827, 5920, 7670, 9560
		11.30–11.55	9700, 11765, 15312

17.00–17.55	7255[1], 9700, 11765, 15312[2]
20.00–20.30	1160, 6245, 7670, 11970
Bulgarian	
11.00–11.10	6070[1], 7255, 9700, 11765[2]
22.00–22.10	6245, 7670, 9700[1], 11765, 11970, 15312[2]
English	
19.30–20.00	6070, 9560
21.30–22.00	6070, 9560
00.00–01.00b	9700
Esperanto	
20.05–20.30	5920
23.30–23.55	6070, 9560
French	
19.00–19.30	6070, 9560
21.00–21.30	6070, 9560
German	
20.00–21.00	6070, 9560
Greek	
04.30–05.00c	827, 6070, 7670, 9560
05.30–06.30d	827, 6245, 9560
06.00–06.30c	827, 1160, 6070, 7670, 9560
09.00–10.00d	6070[1], 7255, 9700, 11765[2]
12.00–12.30	1160, 6070, 7255, 9700
16.30–16.55	6070, 7255, 9700
19.00–19.30	6245, 7670
20.30–21.00	827, 6245, 7670, 11970
Italian	
18.00–18.30	6070[1], 6245, 7255, 9700[2]
20.30–21.00	5920, 9700
22.00–22.30	827, 6070, 9560
Macedonian	
05.00–05.30c	827, 6070, 7670, 9560
06.30–07.30d	827, 6070, 7670
21.00–21.30	827, 7670
Serbo-Croat	
07.30–08.30	827, 6070, 7670
21.30–22.00	827, 6245, 7670
Spanish	
22.30–23.00	7255[1], 9700[2]
Turkish	
05.30–06.00c	827, 962, 1160, 1295, 6070, 7670, 9560
05.30–06.30d	962, 1160, 1295, 6070, 7670
10.00–11.00	1160, 1295, 6070[1], 7255, 9700, 11765[2]
16.00–16.30	1160, 1295, 6070, 7255[1], 9700[2]
18.30–19.00	6245, 7255[1], 7670, 9700[2]
19.30–20.00	1160, 1295, 6245, 7670

TO AFRICA

English	**kc**
19.05–19.30*	11970, 15312
21.05–21.30**	9700[1], 11765, 11970, 15312
French	
19.30–20.00*	11970, 15312
21.30–22.00**	9700[1], 11765, 11970, 15312[2]

*=to Ea. Africa – **=to We. Africa.

TO NORTH AMERICA

Bulgarian	**kc**
23.30–24.00	9700
01.00–01.30	9700
English	
00.00–01.00	9700
04.00–04.30	9700
Spanish	
02.00–02.30	9560
04.30–05.00	9700

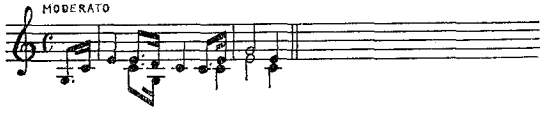
TO SOUTH AMERICA

Bulgarian	**kc**
23.00–23.25	7255[1], 9700, 11765, 15312[2]
00.30–01.00	9560, 9817[1], 11765[2]
Spanish	
22.30–23.00	7255[1], 9700, 11765, 15312[2]
00.00–00.30	9560, 9817[1], 11765[2]
02.00–02.30	9817[1], 11765[2]

[1] to March 1st 1967; [2] from March 1st 1967. a) Sat only; b) Concert (also for No. Am). c) exc. Sat; d) Sun only.

DX-PRGR: English: Fri 19.30, 21.30 (to Gt. Britain); Sat 00.00, 04.00 (to USA); **German:** 1st & 3rd Sun 20.00; **French:** 1st Sun at 21.00; **Spanish:** 2nd Thurs 22.30, Fri 00.00.

ANN: Home Sce: "Govori Sofia" – Foreign Sce: E: "This is Sofia, Bulgaria Calling". F: "Ici Sofia, Radiodiff-Television Bulgare". Tu: "Burasi Sofia radiosu". Gr: "Milai i Sofia". G: "Hier spricht Sofia Bulgarian". I: "Que é R. Sofia". Arabic: "Huna Sofia". Sp: "Habla Sofia" – **INT-SIG:** Youth March played on organola.



V. by QSL-card or letter. Recordings accepted – **PUB:** Prgr.schedule. **FI:** By state – **AD:** D. 13.30–14.00.

CZECHOSLOVAKIA

L.T: GMT+1 h – **Pr.L:** Czech, Slovak.

CESKOSLOVENSKY ROZHLAS (Gov.)

ADDR: Czechoslovak Radio, Praha 2, Vinohradska 12. **Cable:** Radiopraha. **Te:** 2115 – **L.P:** Dir. Gen: K. Hoffmann Dep. Dir. Gen: Dr. M. Marko. Dept. Dir. Gen: R. Behal (Prgr), Dep. Dir. Gen: K. Hrabal (Foreign Sce). Dep. Dir. Gen: M. Junek (Engineering). Dep. Dir. Gen: J. Janousek (Adm). Head Foreign Rel: K. Reif.

HOME SERVICE: Medium Waves

Name	kc	m	kW		kc	m	kW
ČS I	272	1102.9	200	Bratislava	1232	243.5	100
Praha	638	470.2	150	ČS I	1286	233.3	100
Bratislava	701	427.2	100	Praha	1484	202.2	2
Praha	953	314.7	100	Bratislava	1484	202.2	2
Praha	953	314.7	15	ČS I	1520	197.3	1
Bratislava	1097	273.5	150	Ostrava	1594	188.0	2

FM:

	Mc	kW		Mc	kW
Praha	68.96	4	No-Moravia	69.08	4
	66.83	4		66.32	4
East Bohemia	69.35	4	West Slovakia	68.84	8
	67.22	1		66.98	8
No. –	70.58	4	Mid. Slovakia	69.68	8
	72.20	4		72.50	8
We. –	69.56	8	East Slovakia	68.87	8
	67.34	8		66.38	8
So. –	70.07	8	Zilina	69.50	1
	71.63	8		71.60	1
Mid-Moravia	69.86	8	Tatry	69.20	1
	71.87	8		67.28	1

CS I: Czech, Slovak: D 03.30–23.00 – **N,Wrp:** W 03.30, 04.30, 05.30, 06.30, 09.00, 11.00, 13.00, 15.00, 17.00, 20.00, 22.00; Sun 05.00, 06.30, 09.00, 12.00, 17.00, 20.00, 22.00 – **Night concerts (with multilingual ann):** Mon–Fri 22.10–23.00 – **L.L: German:** Fri: 21.00–21.20.

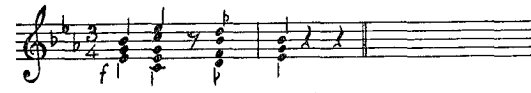
PRAHA: Czech: 03.30 (Sun 05.00)–01.00 – **N, Wrp:** W 03.30, 04.00, 04.30, 05.00, 05.30, 06.00, 06.30, 08.00, 10.00, 12.00, 14.00, 16.00, 18.00, 21.00, 22.50, 00.55. Sun 05.00, 06.00, 08.00, 11.05, 18.00, 21.00, 22.50, 00.55 – **L.L: Russian:** Tues 15.45–16.00

Polish: On 1520kc: D 15.50–16.00, Sat 10.10–10.40. **Bulgarian:** On 1520/1286kc: Sat 17.30–18.00. **German:** On 701/1520kc: W 16.00–16.15, Sun 08.00–09.00.

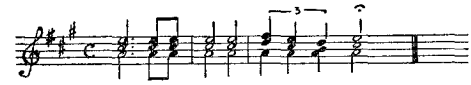
BRATISLAVA: N, Wrp: W 03.30, 04.00, 05.00, 06.00, 08.00, 10.00, 12.00, 14.00, 16.00, 18.00, 21.00, 22.55. Sun 05.00, 06.00, 11.30, 18.00, 21.00, 22.55 – **L.L: Russian:** Wed 21.15–21.35, Fri 14 30–14.50.

Hungarian: 06.00–07.00 (W, 08.45–09.30 (Thurs), 11.00–11.40, 14.00–15.00 (Mon–Fri), 11.00–15.00(Sat), 06.00–14.00(Sun). **Ukrainian:** 11.00–11.10(W) 08.45–09.30(Thurs), 14.30–15.00(Mon–Fri), 15.00–15.30(Tues), 15.30–16.00(Sat), 06.00–06.50(Sun).

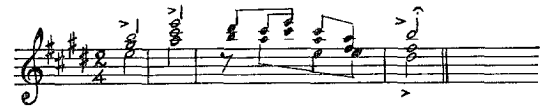
INT-SIG: Praha: "The two opening bars of Smetana's symphonic Poem "Vysehrad".



CS: Fanfares from a March by V. Dobiás.



Bratislava: Fanfares from a March by B. Urbanec:



FOREIGN SERVICE

100kW tr's exc. 1097kc 150kW (G.C: 15.09E/50.09N)

kc	m	kc	m	kc	m	kc	m
1097	273.5	6135	48.90	9550	31.41	15285	19.63
1286	233.3	7115	42.16	9560	31.38	15310	19.60
5930	50.59	7285	41.18	9795	30.63	15448	19.42
6055	49.55	7345	40.85	11960	25.08	17825	16.83
6095	49.22	9505	31.56	11990	25.02	21450	13.99

Schedule 17/10 1966–16/4 1967

TO EUROPE

English	kc
07.00–08.00	6055
12.00–12.30	9560, 11960, 15285
15.30–16.30	6055
19.00–19.30	5930, 7345
French	
11.00–12.00	6055, 9505
German	
08.00–09.30	6055, 9505
09.30–11.00*	6055, 9505
Italian	
12.00–13.00	6055, 9505
13.00–14.30**	6055, 9505
17.00–17.30	5930, 7345
Spanish	
12.30–13.00**	6135, 11960, 15285
13.00–13.30	6135, 11960, 15285
18.30–19.00	5930, 7345

*) to Austria; **) Sat/Sun only

TO AFRICA

Arabic	kc
16.30–17.30	7285, 9795, 11990
19.30–20.30	5930, 7345, 9795
English	
15.30–16.30	6055, 7345, 9550 11990, 15285
17.30–18.30	5930, 7285, 7345 9795, 11990
French	
18.30–19.30	7285, 9795, 11990
20.30–21.30	5930, 7345 9795, 11990
Swahili	
15.00–15.30	6055, 7345, 9550 11990, 15285

TO FAR EAST/AUSTRALIA

English	kc
07.00–08.00	9550, 15310 15285, 21450

Every month first-hand information on the world of broadcasting is offered to you in the

EBU REVIEW

Published in English and French by the European Broadcasting Union

Part A — Technical will keep you informed of all new technical developments in sound and television broadcasting.
— Articles written by specialists describe typical new installations, new operational methods and research work undertaken by the broadcasting organizations.
— The "International News" section is devoted to news items reported by EBU Members concerning the installation and operation of transmitting stations and studio centres, recording equipment and outside broadcast facilities, both for sound and for television.
— Each number gives a summary of the changes that have taken place during the previous two months in the spectra of the long, medium and metric (FM) sound broadcasting wavebands and of the television wavebands.

Part B — General and Legal — brings you authoritative reports on radio and television developments throughout the world in the non-technical fields. Specialists write on the latest trends in

programming, administration, and planning,

progress and activities are reported from the international sphere, and from broadcasting organizations in over 50 countries

experts analyse legislation and jurisprudence touching on broadcasting, new Copyright Acts, etc.,

special numbers give in-depth coverage of key subjects, including educational broadcasting, graphics and design, news programming, religious programming, Eurovision developments, and agricultural broadcasting.

ANNUAL SUBSCRIPTION

Part A (six numbers): 230 Belgian francs. Publishers: EBU Technical Centre, 32 Avenue Albert Lancaster, Brussels, Belgium.

Part B (six numbers): 20 Swiss francs. Publishers: EBU Administrative Office, 1 rue de Varembé, 1200 Geneva, Switzerland.

A combined subscription to Parts A and B (12 numbers) may be ordered either from Brussels or Geneva (price 420 Belgian francs or 36 Swiss francs).

TO SO & CE AMERICA

Czech/Slovak	kc
22.30–23.00	5930, 7345 9795, 11990
Portuguese	
21.30–22.30	5930, 7345 9795, 11990
00.00–01.00	5930, 7115, 7345 9550, 11990
Spanish	
23.00–24.00	5930, 7115, 7345 9550, 11990
02.00–03.00	6095, 7115, 7345 9550, 11990

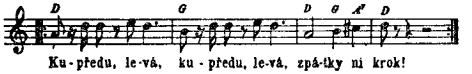
TO NORTH AMERICA

Czech/Slovak	kc
13.30–14.00***	15285, 15448, 17825
03.00–03.30	6095, 7115, 7345**** 9550,11990****
English	
14.00–15.00***	15285, 15448 17825
01.00–02.00	5930, 7115, 7345 9550, 11990
03.30–04.30	6095, 7115, 7345, 9550, 11990

) Sun only *) to Near East/So. Asia.

MW SCE. for Europe: On 1286kc: English: 22.00–22.30; **French:** 20.30–21.00, 21.30–22.00; **German:** 18.00–18.30, 19.00–19.30, 20.00–20.30; **Italian:** 18.30–19.00: **Spanish:** 23.00–23.30. **On 1097kc: English:** 23.05–23.30

Prgr's for radioamateurs and SWL's:
R: Prague: Every Wed at 19.00, 23.05. To No. America: Thurs (fortnightly) 01.00, 03.30. To Far East/ Australia: 2nd Thurs 07.00. For Monitor Clubs: 4th Thurs 07.00. **In German:** 1st Thurs 19.00, repeated following Thurs 08.00. For Austria: 3rd Sun 09.30, repeated following Tues 17.05.
ANN: E: "This is Prague". **Arabic:** "Huna Pragh". **F:** "Ici Prague, Tchécoslovaquie". **I:** "Qui Praga, Cecoslovacchia". **G:** "Hier spricht Prag". **Sp:** "Aqui R. Praga, Checoslovaquia". **P:** "Aqui fala a R. Praga". **Czech/Slovak:** "Posloucháte Prahu, vysilani Cs. rozhlasu pro krajany" – **INT-SIG:** The opening bars of the song "Forward Left" by J. Seidl, played on trumpets.



V. by QSL-card and letter. Recordings accepted – **PUB:** Foreign Sce. sched. free on request. – **FI:** By license payments & adv – **AD:** Mon, Wed, Thurs, Fri 07.55; Mon–Fri 14.55; Wed, Thurs 16.50; Sat 16.35 – **ALF:** 60,– Czech Crowns.

DENMARK

L.T: GMT+1 h – Pr.L: Danish.
RADIO DENMARK (Gov.)
ADDR: Radiohouse, Rosenørnsalle 22, Copenhagen V. **Te:** 350647. **Cable:** Danradio – **L.P:** Dir. Gen: Erik Carlsen. Dir. Prgr (radio): Aksel Dahlerup. Dir. Adm: Ejnar Jensen. Dir. Secretariate: Axel Fischer. Dir. Music: M. Andersen (Acting). Dir. Drama (radio): Jørgen Claudi. Dir. Entertainment (radio): Kaj Bruun. Dir. Press & Foreign Rel: E. Trautmann. Dir. Tec (radio + TV): Fr. Heegaard. Dir. Tec (radio): H. C. Jørgensen. Dir. N: N. Grunnet. Dir. Actualities and Culturdept (radio): Jørgen Vedel-Petersen. Dir. Children, Youth and School Broadc (radio and TV): Valdemar Christensen:

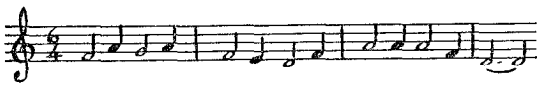
STATIONS: Long & Medium Waves:

	kc	m	kW	Prgr
Kalundborg	245	1224	150	I
Kalundborg	1061	283	60	II
København	1430	210	10	II
Skive	1430	210	70	II
København	1484	202	2	I
Ålborg	1484	202	0.25	I
Tønder	1484	202	0.25	I
Esbjerg	1594	188	2	I

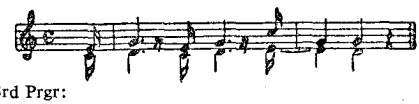
FM:	Mc	kW	Prgr
Århus	88.1	30	I
Fyn	89.0	60	I
Ålborg	89.7	30	III
Århus	91.7	30	III
Fyn	92.6	60	III
Vestjylland	92.9	60	III
Ålborg	93.3	30	I
København	93.85	60	III
Bornholm	94.5	30	I
Sydsjælland	94.8	60	I
Sønderjylland	95.1	50	I
Århus	95.9	30	II
Bornholm	90.0	30	III
Vestjylland	90.2	60	I
København	90.8	60	I
København	96.5	60	II
Fyn	96.8	60	II
Sønderjylland	97.2	50	III
Sydsjælland	97.5	60	II
Ålborg	98.1	30	II
Vestjylland	98.5	60	II
Bornholm	99.3	30	II
Sydsjælland	99.6	60	III
Sønderjylland	99.9	50	II

HOME SCE:
1st Prgr: W 05.00 23.05, Sun 07.00 23.05.
N: 05.00(W), 06.00(W), 07.00, 08.00(W), 11.30, 14.30(W), 17.30, 21.00, 22.00(exc. Sat), 23.00 – **Wrp:** 07.45, 10.50(W), 17.05 – **L.L: English:** Tues, Fri 09.40–10.00 – **Rlg:** Sun 09.00, W 07.30.
2nd Prgr: W 17.00–abt. 22.00(Sat 23.05), Sun 08.00–22.10. Mon 18.00–18.45 not on 1061kc (Kalundborg) and 1430kc (Copenhagen). **N:** 17.30 & between 21.00–22.30 – **Rlg:** Sun 13.00 – **L.L:** (from Sept 1st): **English:** Mon, Thurs 16.40–17.00; **German:** Tues 16.15–16.40;

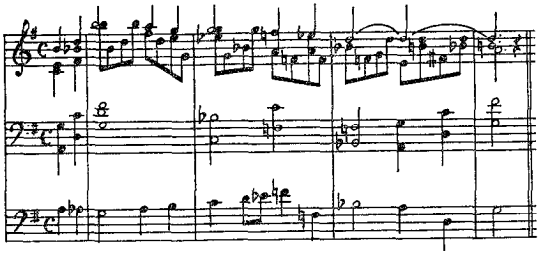
French: Mon, Thurs 16.00–16.20; **Spanish:** Mon, Thurs 16.20–16.40; **Russian:** Tues, Sat 16.00–16.15; **Swedish:** Sat 16.15–16.35 (twice monthly).
3rd Prgr (Musical Prgr): W 11.00–19.00, Sun 11.00–23.05. Also 21.00–23.00 on Prgr I (this prgr. is also relayed by the tr's of the 2nd prgr: Mon–Fri 05.00–07.05, 11.00–16.00, 22.00–23.05, Sat 05.00–07.05, 11.00–16.00, Sun 11.00–16.00, 22.00–23.05). N: hourly.
Reg Prgr's: Mon 18.00–18.45 on 93.3Mc/1484kc (Ålborg); 88.1Mc (Århus); 90.2Mc (Vestjylland); 95.1Mc (Sønderjylland), 1484kc (Tønder); 1594kc (Esbjerg); 89.0Mc (Fyn); 94.8Mc (Sydsjælland); 90.8Mc/1484kc (København); 94.5Mc (Bornholm).
During the times for Regional Prgr's Kalundborg I 245kc is used for special prgr. prepared by the Shortwave Department.
ANN: "Danmarks Radio, Program 1" (Program II) – **INT-SIG:** Prgr. I: From an old Danish folksong. D. at 11.00 and 19.00: The chimes of the Town Hall in Copenhagen.



Prgr. II:



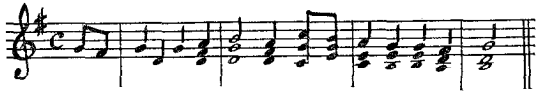
INT-SIG: 3rd Prgr:



FOREIGN SCE: One 50kW (tr).
STATIONS (G.C: 12.21E/55.41N):
OZF5 9520kc 31.51m – OZF7 15165kc 19.78m.

Times	L	kc	Area	News
01.00–01.45	Danish	9520	No. Am.	01.00 (D)
01.45–02.15	English	9520	No. Am.	01.45 (E)
07.00–07.45	Danish	15165	F. East	07.00 (D)
07.45–08.15	English	15165	F. East	07.45 (E)
10.15–11.00*	English	9520	Beam: 236°	10.15 (E)
12.00–12.45	Danish	15165	No. Am.	12.00 (D)
12.45–13.15	English	15165	No. Am.	12.45 (E)
13.30–13.45	Danish	15165	Greenland	13.30 (D)
14.00–14.45	Danish	15165	So. Asia	14.00 (D)
14.45–15.15	English	15165	So. Asia	14.45 (E)
16.00–16.45	Danish	15165	So. Am.	16.00 (D)
16.45–17.15	Spanish	15165	So. Am.	16.45 (Sp)
17.30–18.15	Danish	15165	Greenland	17.30 (D)
18.30–19.15	Danish	15165	Africa	18.30 (D)
19.15–19.45	English	15165	Africa	19.15 (E)

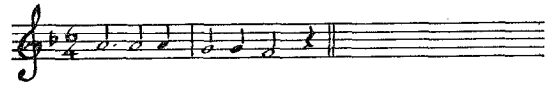
On Sundays all prgr's are in Danish. * Sat only (test).
Each broadcast consists of ¾ h Danish followed by ½ h English or Spanish, and a news bulletin is the first item on the prgr.
Emphasis is laid on cultural and social material, on aspects of the many facets of life in Denmark, Danish relations with the rest of the world, and also included in the prgr's are classical and light music, DX-Bulletins, topical events and mailbag get-togethers.
INT-SIG & ANN: Danish tr's preceded by repetition of first bars of Danish National song by Carl Nielsen:



followed by words: "Danmarks Radio". The English tr's begin with: "This is Denmark".
Message to Listeners: Radio Denmark is anxious to receive reports on prgr. and on reception conditions from all parts of the world. It makes every endeavour to get into touch with countrymen and listeners in countries abroad with a view to provide the best possible sw-sce – V. by letter or QSL-card. Recordings accepted – **PUB:** "Voice of Denmark" (quarterly) mailed upon request – **ALF:** Kr. 50,–.

FAROE ISLANDS (Danish Territory)

L.T: GMT – **Pr.L:** Faroese.
UTVARP FØROYA
ADDR: Thorshavn. **Te:** 2437. **Telex:** 26 – **L.P:** Mgr: N. J. Arge.
STATION (System: Marconi): 584kc 513m 5kW.
HOME SCE: Mon–Fri 07.15–08.00, 12.00–13.00(Wed 14.00), 18.30–20.00; Sat 07.15–08.00, 12.00–16.00, 18.30–21.00; Sun 14.00–18.00 – Prgr's consist of Wrp, N from the Faroes, foreign N, lectures, music, features, radioplays, interviews, morningprayer – **ANN:** "Utvarp Föroya" – **INT-SIG:** Xylofon – **V.** by letter. Recordings accepted – **ALF:** Kr. 45,–.



FINLAND

L.T: GMT+2 h – **Pr.L:** Finnish, Swedish.
OY YLEISRADIO AB (Gov.)
ADDR: Unioninkatu 16, Helsinki (addr. for TV see TV section). **Te:** 630691. **Cable:** Yleisradio. **Telex:** 12-735.
L.P: Dir. Gen: E. S. Repo. Dep. Dir. Gen, Dir. Staff Adm: L. H. Vennola. Asst. Dir. Staff Adm: R. Koski. Dir. of Finnish Prgr: J. Koskiluoma. Dir. Swedish Prgr: Ch. Schildt. Dir. Eng: P. Arni. Asst. Dir. Eng: P. Velander. Dir. Finance: E. Vallila. Asst. Dir. Finance: M. Tamminen. Head Foreign Rel: Mrs. S. Palmgren.
STATIONS: Long & Medium Waves:

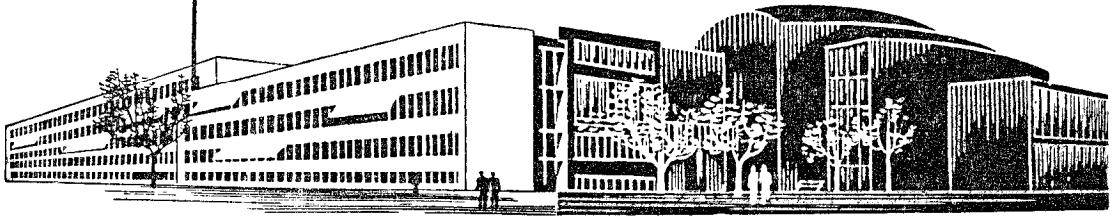
	kc	m	kW	Prgr group
Lahti	254	1181	200	A
Oulu	433	693	10	A
Joensuu	520	577	1	A
Helsinki I	557	539	100	D
Kuopio	755	397	20	A
Ylivieska	836	359	10	A
Turku I	962	312	100	D
Vaasa	1241	242	25	D
Helsinki II	1412	212	2	B
Turku II	1412	212	0.4	B
Tampere	1421	211	1	A
Pietarsaari	1484	202	1	C
Pori	1484	202	1	A

FM	Mc	kW	Prgr group
Eurajoki I	92.0	15	A
Eurajoki II	87.7	15	B
Eurajoki III	99.4	3	C
Forssa I	92.8	0.1	A
Forssa II	89.2	0.1	B
Helsinki I	94.0	40	A
Helsinki II	91.9	40	B
Helsinki III	98.8	40	C
Iisalmi I	87.7	0.7	A
Iisalmi II	92.8	0.7	B
Joutseno I	90.7	25	A
Joutseno II	88.0	25	B
Jyväskylä	92.5	25	A
Jyväskylä II	89.9	25	B
Kajaani I	94.3	40	A
Kajaani II	98.9	40	B
Karigasniemi I	93.4	0.7	A
Karigasniemi II	89.5	0.7	B
Kaunispää I	98.8	15	A
Kaunispää II	94.3	3	B
Kerimäki I	95.8	15	A
Kerimäki II	99.1	15	B
Kilpisjärvi	89.4	0.01W	A
Kokkola I	99.7	0.7	A
Kokkola II	97.6	0.7	B
Koli I	90.1	15	A
Koli II	93.4	15	B
Kuopio I	91.6	25	A
Kuopio II	96.2	25	B
Lahti I	95.5	40	A
Lahti II	97.9	40	B
Lapua I	90.1	60	A
Lapua II	93.1	60	B
Loviisa	89.2	0.05	C
Mariehamn	91.3	5	C
Mikkeli I	88.9	25	A
Mikkeli II	94.6	25	B
Näätämö	87.8	0.01W	A
Oulu I	90.4	50	A
Oulu II	97.3	50	B
Pello I	99.1	15	A
Pello II	89.5	3	B
Pietarsaari	94.3	10	C
Pihtipudas I	97.0	10	A
Pihtipudas II	88.6	10	B
Pyhätunturi I	97.6	15	A
Pyhätunturi II	91.0	3	B
Pyhävuori I	94.6	15	A
Pyhävuori II	91.0	15	B
Pyhävuori III	88.9	15	C
Rovaniemi I	96.7	10	A
Rovaniemi II	94.0	10	B
Ruka I	90.7	0.7	A
Ruka II	92.8	0.7	B
Sammal-tunturi I	95.2	15	A
Sammal-tunturi II	98.2	3	B
Sippola I	92.8	5	A
Sippola II	96.4	5	B
Taivalkoski I	89.2	45	A
Taivalkoski II	91.9	45	B
Tammisaari I	97.0	3	A
Tammisaari II	99.7	3	B
Tammisaari III	93.1	3	C
Tampere I	90.7	45	A
Tampere II	93.7	45	B
Tervola I	92.2	10	A
Tervola II	88.6	10	B
Turku I	94.3	50	A
Turku II	98.2	50	B
Turku III	89.8	50	C
Utsjoki I	90.7	1	A
Utsjoki II	99.4	1	B
Vaasa	95.2	6	C
Ylivieska I	94.0	15	A
Ylivieska II	96.1	15	B
Ähtäri I	94.9	1	A
Ähtäri II	88.0	1	B

HOME SCE: All st's: W 04.00–22.00. Sun 05.30–22.00. **N:** W 04.00, 05.00, 06.00, 08.00, 09.30, 10.30, 12.00, 13.00, 14.00, 15.00, 17.00, 19.00, 20.00, 21.00, 22.00. Sun 06.30, 10.30, 17.00, 19.00, 20.00, 21.00 –

Listen to
THE VOICE OF DENMARK

The Danish shortwave transmissions are beamed to
North America, South America, Africa, India and the Far East



DAGLIGT SENDESKEMA - DAILY TRANSMISSION SCHEDULE
CUADRO DIARIO DE EMISIONES

Tid GMT Time GMT Hora GMT	Område Area Area	Sprog Language Idioma	Bølgelængde Wavelength Onda	Frekvens Frequency Frecuencia	Bemærkninger Remarks Observaciones
01.00—01.45 01.45—02.15	Nordamerika North America	Dansk English	31.51 m.	9.520 kc	Om søndagen er alle programmer på dansk. On Sundays all programmes in Danish. Los Domingos todos los programas en danés.
07.00—07.45 07.45—08.15	Fjernøsten Far East	Dansk English	19.78 m.	15.165 kc	
12.00—12.45 12.45—13.15	Nordamerika North America	Dansk English	19.78 m.	15.165 kc	
13.30—13.45	Grønland	Dansk	19.78 m.	15.165 kc	
14.00—14.45 14.45—15.15	Sydasien South Asia	Dansk English	19.78 m.	15.165 kc	
16.00—16.45 16.45—17.15	Sydamerika América del Sur	Dansk Español	19.78 m.	15.165 kc	
17.30—18.15	Grønland	Dansk	19.78 m.	15.165 kc	
18.30—19.15 19.15—19.45	Afrika Africa	Dansk English	19.78 m.	15.165 kc	
10.15—11.00	Test transm. (Saturdays)	English	31.51 m.	9.520 kc	Saturdays only.

Listeners all over the world are invited to send reception reports together with their criticisms and programme suggestions to

the SHORTWAVE DEPARTMENT, RADIO HOUSE, COPENHAGEN V., DENMARK

Answer by letter or QSL-card

Wrp: 05.00, 06.00(Sun 06.30), 10.30, 17.00, 20.00. **Wrp. for seas** (in Finnish & Swedish): Groups C+D 11.00 (also on 254, 433kc), 17.10, 20.10.
Swedish N: Groups C+D: W 04.10, 05.10, 06.10, 08.00, 09.35, 10.40, 12.00, 13.00, 14.55, 17.20, 20.10, 22.00. Sun 06.40, 10.40, 17.20, 20.10 – **Wrp:** 05.10, 06.10(Sun 06.40), 10.40, 17.20, 20.10.
Main Prgr: Group A: Both light and serious prgr. Regular prgr's: Morning Sce's W 05.50, Evening Sce's W 17.30, Divine Sce Sun 08.00.
Second Prgr: Group B: Light musical prgr. to 16.00 and after 21.00. Serious prgr: 16.00–21.00.
Bilingual Prgr: 16.00–20.30. In addition odd hrs in the morning and early afternoon. Other times Finnish Main or Second prgr.
Exclusively Swedish: Mariehamn FM 91.3Mc.

FOREIGN SERVICE
Stations: Pori (G.C: 21.52E/61.28N)

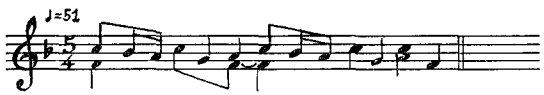
OIX7	6120kc 49.02m 15kW	OIX8	11805kc 25.41m 10kW
OIX2	9555kc 31.40m 15kW	OIX4	15185kc 19.76m 100kW

ENGLISH
For Europe on 9555/11805/15185kc: Fri 16.00–17.00. "DX-Mailbag Show", repeat Fri 21.00 on 6120kc, Sat 16.00–16.30 "Finlandia Mixture".
Repeat for Europe on 9555/11805kc **for No. America** on 15185kc: Sat 12.15–13.15, Sun 12.15–12.45.

FINNISH& SWEDISH
For Europe: On 6120kc: W 04.00–22.00(Fri 21.00), Sun 05.30–22.00 rel. Home Sce, bilingual prgr – On 9555/11805kc: W 06.00–06.20, Sun 06.30–06.50 N in Finnish & Swedish – On 9555/11805/15185kc: 10.00–11.10, 16.00–18.30 (Fri 17.00–18.30, Sat 16.30–18.30): **Swedish:** W 18.00–18.30, **Wrp:** Finnish 10.30, 17.00, Swedish 10.40. **Wrp for seas** (in Finnish & Swedish): 11.00.

Prgr. for seamen (Finnish & Swedish): Sun & holidays 17.30–18.30. Repeat for Europe on 9555/11805kc, for North America on 15185kc 13.45–14.45.
Repeat from the day before: 12.15–15.10 (Sat 13.15–15.10, Sun 12.45–15.10).

ANN: Before and after each tr. there are st.ann. in Finnish, Swedish and English. Finnish: "Suomen Yleisradio". Swedish: "Finlands Rundradio". English: "You are tuned to the Finnish Broadcasting Company".
INT-SIG: Based on an old Finnish Folk melody – V. by QSL-card.



PUB: Prgr-schedules to Listeners: schedules of the short wave tr's containing the same information as given in the World Radio Television Handbook, can be obtained by writing to "DX-Editor" of the Finnish Broadc. Co.
FI: by license payments – ALF: Fmk 20,-.

NOREA RADIO FINLAND

FI: By gifts from listeners and friends – **ADDR:** *Kauniainen* – **L.P:** Dir. Adm; E. Honkanen. Dir. Prgr: E. Hirvonen – **D.PRGR. in Finnish:** Tues & Fri 16.30–16.45 on 9558kc (100kW) over R. Monte-Carlo – V. by QSL-card.

FRANCE

L.T: GMT+1 h – **Pr.L:** French.

OFFICE DE
RADIODIFFUSION-TELEVISION FRANCAISE
(Publicly owned).
Central Service:
ADDR: Maison de l'O.R.T.F, 116, Avenue du Président Kennedy, Paris 16. **Cable:** ORTFDIR. **Te:** 224–22–22.
Regional Service: 32–34, rue Ulysse Gayon, Bordeaux – 36, Bd. de la Liberté, Lillle – 6, Bd. Victor Hugo, Limoges – 2, rue Hoche, Dijon – A Part Dieu, Lyon – 2 allée Ray Grassi (Parc Chanot), Marseille – 6 Avenue Hippolyte Maringer, Nancy – 9, Avenue Janvier, Rennes – Place de Bordeaux, Strasbourg – 78, allées Jean Jaurès, Toulouse.
L.P: *Prés du Conseil d'Adm:* W. Lefèvre d'Ormesson. *Secr. Gen. du* Conseil l'Adm: J. Chaveau. Dir. Gen: J.B. Dupont. Dir. Gen Adjoint: A.L. Astoux. Pres. des Comités des Programmes(radio): P. Descaves. Secr. Gén: G. E. Clancier. Contrôle d'Etat: R. Brian – R. Griffaut. Agent Comptable: E. Jalouneix. Chef du Service des Affaires Générales: R. Samama. Chef du Service de la Recherche: P. Schaeffer. Chef des Services des Relations Publiques et des Affaires Commerciales: S. de Gozdawa-Godlewski. Délégué aux Stations Régionales: B. Gouley. Inspecteurs Généraux: P. Bodin, M. Freneau, A. M. Gerard, J. Landrac. Dir. de l'Equipement et de l'Exploitation: C. Mercier. Dir. Adjoint, chargé de l'Equipement: G. Chedeville. Dir. de l'Administration Générale: G. Riou. Dir. de la Radiodiff: P. de Boisdeffre. Dir. Adjoint: R. Dhordain. Dir. Général Adjoint, Dir. de la Télévision: C. Contamine. Dir. Adjoint: J. Thibau. Dir. des Relations Extérieures: J. Flaud. Dir. Adjoint: M. Robida.

HOME SERVICE

FRANCE-INTER

	kc	m	kW		kc	m	kW
Allouis	164	1829	500/250*	Marseille III	1493	201	1
				Strasbourg III	1493	201	1
Grenoble II	1484	202	0.05	Nîmes	1594	188	1
Montpellier II	1484	202	1	Toulon	1594	188	0.05
Perpignan	1484	202	1				

*500kW d 05.00–23.00
D.PRGR: On 164 kc: 24 h (exc. Fri 03.08–04.00). Other tr's 05.00–23.00 (exc. Tues 08.40–10.30) – **N:** Every h on the h and 06.30 – "Inter Service Route" (For motorists): 00.20, 03.45, 04.50, 07.20, 10.57, 18.45.

FRANCE-INTER "VARIETES"

	kc	m	kW		kc	m	kW
Paris III	584	514	1	Pau	1403	214	20
Lyon I	602	498	100	Bayonne I	1493	201	4
Marseille I	674	445	150	Brest III	1493	201	0.05
Rennes I	710	423	150	Nantes II	1493	201	0.05
Limoges I	791	379	100	Amiens	1484	202	0.05
Nancy I	836	359	150	Caen	1484	202	0.05
Toulouse I	944	318	100	Dijon	1484	202	1
Paris II	1070	280	100	Poitiers	1484	202	1
Strasbourg I	1160	259	150	Ajaccio	1493	201	1
Bordeaux I	1205	249	100	Reims	1493	201	0.05
Lille I	1376	218	150	Tours	1493	201	0.05
Bastia I	1403	214	4	Nice I	1554	193	100
Brest II	1403	214	20	Lorient	1594	188	0.05
Clermont-Fd.	1403	214	20	Metz	1594	188	0.05
Montpellier I	1403	214	10	Angers	1594	188	0.05
Rouen	1403	214	20	St. Quentin	1594	188	0.05

FM: *0.05kW; **2kW; others 12kW

Station	Mc	Station	Mc	Station	Mc
Amiens*	95.95	Gex**	94.4	Paris	93.35
Angers*	93.2	Grenoble**	99.4	Perpignan**	92.1
Aurillac**	94.5	Le Mans	92.6	Reims	96.8
Bastia**	95.9	Lille	94.7	Reims*	97.43
Besançon**	90.0	Limoges	93.0	Rennes	93.55
Bordeaux**	89.7	Lyon	99.8	Rouen	96.5
Boulogne*	95.5	Marseille	91.27	St. Quentin*	87.93
Bourges	94.9	Metz	99.8	St.-Raphael**	96.3
Brest	93.0	Metz*	98.5	Strasbourg	97.3
Caen	99.6	Mezieres**	95.8	Toulon**	94.9
Carcassonne	88.3	Mulhouse	95.7	Toulouse**	87.9
Chambery*	99.0	Nancy**	96.9	Tours*	98.7
Cherbourg*	94.15	Nantes	90.6	Troyes	95.3
Clermont-Fd**	90.4	Nimes*	96.8	Valenciennes*	97.2
Dijon**	95.9	Niort	99.4	Vannes**	88.6

Projected: Ajaccio**, Antisanti*, Boulogne*, Chambery**, Le Havre*, Longwy**.
D.PRGR: "France Inter Varietes": W 19.30–22.00. Sun 14.00–17.00, 19.30–23.00. Other times (from 05.00) relay France-Inter. **N:** see France Inter.
Nice I 1554kc relays France Inter(164kc) at 23.00–05.00. Reg. Prgrs are radiated by the mw st's of France Inter Variétés as follows: D 05.30–05.45, 06.30–07.00, 11.30–11.45, 18.30–18.50. Sun also 13.00–14.00, Mon also 19.35–23.00, Fri also 19.45–23.00.

FRANCE CULTURE

	kc	m	kW		kc	m	kW
Bayonne II	539	557	0.05	Strasbourg	1277	235	100
Paris I	863	348	300	Bordeaux II	1349	222	20
Brest I	1241	242	20	Grenoble I	1349	222	20
Lille II	1241	242	20	Limoges II	1349	222	20
Lyon II	1241	242	20	Nantes I	1349	222	10
Marseille II	1241	242	20	Toulouse II	1349	222	20
Nancy II	1241	242	20	Saint-Brieuc	1493	201	0.05
Nice II	1241	242	20	Besançon	1493	201	1
Rennes II	1241	242	24				

FM: *0.05kW; **2KW; others 12kW.

Station	Mc	Station	Mc	Station	Mc
Aurillac**	98.0	Grenoble**	88.2	Paris	97.6
Bayonne*	91.0	Le Mans	89.0	Perpignan**	99.8
Bastia**	89.2	Lille	98.0	Reims	98.85
Besançon**	97.7	Limoges	89.5	Rennes	98.3
Bordeaux**	98.1	Lyon	88.8	Rouen	94.0
Bourges	88.5	Marseille	99.0	St-Raphael**	88.7
Brest	97.8	Metz	94.5	Strasbourg	87.7
Caen	91.53	Mezieres**	90.1	Theus*	88.0
Carcassonne	96.5	Mulhouse	88.6	Toulon**	89.6
Clermont-Fd**	98.6	Nancy**	88.7	Toulouse**	95.7
Dijon**	93.7	Nantes	94.2	Troyes	97.9
Gex**	96.7	Niort	96.4	Vannes**	96.0

Projected: Ajaccio, Antisnati, Boulogne, Chambery, Le Havre Longwy**.

Finnish-language Main Programme

Finnish-language Second Programme

Swedish-language Main Programme

Short Wave Programme

TV Programme 1

TV Programme 2

Oy. YLEISRADIO Ab.

(The Finnish Broadcasting Company)

D.PRGR: 06.00–23.00. **N:** 06.30, 11.30, 18.30 – **Reg. Prgr** (Grenoble 1349kc): 06.30–06.45, 11.30–12.00(Sat 13.00–14.00).

FRANCE MUSIQUE:

FM: * 0.05kW; ** 2kW; others 12kW.

Station	Mc	Station	Mc	Station	Mc
Aurillac**	91.9	°Gex**	89.6	Niort	91.1
Bastia**	93.9	°Grenoble**	91.8	°Paris	90.35
Besancon**	92.9	Le Mans	97.0	Perpignan**	97.2
°Bordeaux**	93.5	°Lille	88.7	°Reims	89.2
Boulogne*	89.4	Limoges	97.5	Rennes	89.9
Bourges	91.8	°Lyon	92.4	Rouen	92.0
Brest	89.4	°Marseille	94.2	St-Raphael**	99.6
°Caen	95.6	Metz	89.7	°Strasbourg	95.0
Carcassonne	90.9	Mezieres**	93.5	Toulon**	97.1
°Clermont-Ferrand**	95.5	Mulhouse	91.6	°Toulouse**	91.5
Dijon**	99.2	Nancy**	91.8	Troyes	91.4
		Nantes	98.9	Vannes**	91.8

° Stereophonic broadcasts.

Projected: Ajaccio, Antisanti, Chambery, Le Havre, Longwy.

D.PRGR: 06.00–23.00 – **N:** 06.30, 11.30, 18.30.

SPECIAL BROADCASTS: Paris IV 962kc 312m 10kW (Cultural, R. Sorbonne, University broadcasts) – **FM:** Paris 87.8Mc 12kW (University broadcasts).

ANN: "France Inter" – "Inter Variétés" – "France Culture" – "France Musique".

INT-SIG: France Inter:

France Culture:

France Musique:

FOREIGN SERVICE

STATIONS: Allouis & Issoudun (G.C: 02.00E/47.00N, 02.13E/47.10N): 20 × 100kW tr's.

kc	m	kc	m	kc	m	kc	m
5955	50.38	9560	31.38	11920	25.17	17765	16.89
5960	50.34	9570	31.35	11970	25.06	17850	16.81
6175	48.58	9585	31.30	15130	19.83	21520	13.94
7160	41.90	9620	31.19	15160	19.79	21580	13.90
7180	41.78	9755	30.76	15245	19.68	21620	13.87
7280	41.21	11845	25.33	15295	19.62		
9525	31.50	11885	25.24	17740	16.91		

EUROPEAN SERVICE

	kc		kc
Bulgarian		**Polish**	
16.30–17.00	5955, 7180	10.00–11.00 (Sun)[1]	9560
	9570, 9620	17.30–18.00	1376
Czech		19.20–20.00	5955, 7180
18.40–19.05	5955, 7180		9570, 9620
	9570, 9620	**Portuguese**	
French		19.00–19.30	7160, 9560
09.00–10.00 (Sun)[1]	7160	**Rumanian**	
11.00–22.00*	6175	17.00–17.30	5955, 7180
15.45–18.30	11920		9570, 9620
15.45–20.00 (W)	11920	**Russian**	
German		15.45–16.30	5955, 7180
18.00–18.45 (W)	1277		9570, 9620
18.40–19.30 (Sun)	1277	**Serbo-Croat**	
Greek		17.40–18.10	5955, 7180
12.15–12.45	15160, 15245		9570, 9620
Hungarian		**Slovak**	
18.10–18.40	5955, 7180	19.05–19.20	5955, 7180
	9570, 9620		9570, 9620
		Spanish	
		22.00–23.00	944

[1] Mass. * relay Paris Inter.

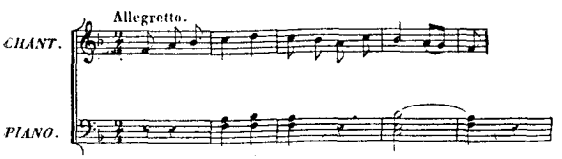
OVERSEAS SERVICE

I = French Polynesia, New Caledonia, New Hebrides; II = Africa; III = Antarctica; IV = Antilles, Guiana, St. Pierre et Miquelon; V =

Far East; VI=Indian Ocean; VII=Middle East; VIII=Canada; IX=Latin America – All prgr's in French exc. where indicated.

Arabic:	Area	kc	French	Area	kc
11.30–12.15	VII	17740, 21620	14.00–17.00*	II	21580
19.45–21.30	II	7280, 9585	15.00–16.00	VI	17765, 21620
English			15.30–15.45	VI	15245, 17740 21520
13.00–13.30	V	15245, 17790 21580	15.45–20.00	VI	11845
French			19.00–19.30	IV	15295, 17850
06.00–06.30	I	5960, 9620	19.00–19.30	VI	11970
07.00–07.15	II	15245, 17850	20.00–21.00	I	11845
07.00–07.30	VI	17765, 21620	21.00–22.00	IV	9525, 11885 15130
07.30–08.00**	III	17765, 21620	00.00–00.30	IX	9755, 11845
08.00–09.00	I	5960, 9620 11845	Portuguese		
10.30–11.00	IV	15245, 17765 21580	23.15–23.45	IX	9755, 11845
			Spanish		
11.00–12.30	IV	15145, 17765 21580	00.30–02.00	IX	9755, 11845
			23.00–23.15	IX	9755, 11845
13.30–14.00	V	15245, 17740 21580	23.45–24.00	IX	9755, 11845

* Sun only. ** Mon only.
ANN: "Ici Paris, Office de Radiodiffusion-Télévision Française"
INT-SIG: Popular song: "Nous n'irons plus au bois"



V. by QSL-card. ALF: Frcs 30,–.

O.C.O.R.A. (Office de Coopération Radiophonique).
an organization the purpose of which is improvement and development of Broadc. and Television in "les Etats Independants d'Afrique d'expression Française".
ADDR: 46, rue d'Amsterdam, Paris 9é. Cable: O.C.O.R.A. Te: PIGallé 99-39 – L.P: Pres. of the Board of Adm: J. B. Dupont. Dir. Gen: F. Cardin. Secr. Gen: G. Ridoux.
STATIONS: R. Bujumbura (Burundi), R.diff. de Cameroun (Yaoundé, Doùala, Garoua), R. Bangui (Bangui), R. Congo (Brazzaville), R.diff. Nationale (Kinshasa), R. Abidjan (Abidjan), R.diff. du Dahomey (Cotonou), R. Gabon (Libréville), R. Haute Volta (Ouagadougou), R.diff. Nationale Malgache (Tananarive), R. Mali (Bamako), R. Mauritania (Nouakchott), R. Niger (Niamey), R. Rwanda (Kigali), R.diff. du Senegal (Dakar), R.diff. Nationale Tchadienne (Fort Lamy), R.diff. du Togo (Lomé).

CANADIAN FORCES NETWORK (Mil.)
ADDR: Chateau De Mercy, Metz – STATIONS: Metz 93.3Mc – Affiliates: Marville 95Mc, Grostenquin 96Mc, *Zweibrücken 98.5Mc, *Baden-Sollingen 88.9Mc. All st's 0.05kW – *=located in Germany.

GERMANY

GERMAN FEDERAL REPUBLIC

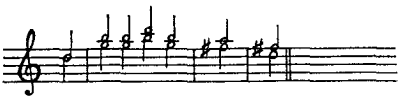
L.T: GMT+1 h – Pr.L: German.
Arbeitsgemeinschaft der öffentlich-rechtlichen Rundfunkanstalten der Bundesrepublik Deutschland (ARD) Broadcasting (Radio and Television):
Chmn: Intendant Chr. Wallenreiter, Bayerischer Rundfunk, 8 München 2, Rundfunkplatz 1 – Permanent Office: Assessor Chr. Strupp, 6 Frankfurt/Main, Bertramstr. 8 – Members: Bayerischer, Norddeutscher, Saarländischer, Hessischer, Süddeutscher und Westdeutscher Rundfunk, Radio Bremen, Sender Freies Berlin, Südwestfunk, Deutschlandfunk, Deutsche Welle, and as guest-partaker at meetings: RIAS, Berlin. Institut für Rundfunktechnik; 2 München-Freimann, Floriansmühlstr. 60 – ALF: DM 24.00.

DEUTSCHLANDFUNK (Gemeinnützige Anstalt des öffentlichen Rechts)
Purpose: Veranstaltung von Rundfunksendungen für Deutschland und das europäische Ausland, die ein umfassendes Bild Deutschlands vermitteln.
ADDR: Köln-Marienburg, Lindenalle 7. Te: 37031.
L.P: Intendant: F. Thedieck. Dir. Aktuelles Programm: F. Barsig. Dir. Kulturelles Program: Dr. J. Petersen. Sendeleiter: E. Imelmann. Verwaltungsdirektor & Justitiar: Freiherr von Sell. Dir. of Engineering: O. Scheffler. Presse: Dr. K. Wagenführ.

STATIONS	kc	m	kW		kc	m	kW
Mainflingen	151	1986.8	50	Ravensburg	755	397	40
Königslutter	548	547	200	Mainflingen	1538	195	300
Bad Dürrheim	548	547	20				

HOME SCE. in German: 03.58–03.45.
N: Every h on the h 04.00–03.00, also at 04.30, 05.30, 06.30, 07.30, 18.30, 20.30.
"Deutschlandecho": W 18.05 – "Die Woche in Deutschland"; Sat 18.45 – "Themen des Tages": Mon–Fri 18.45 – "Prisma der Welt": Mon, Wed, Thus, Sat 20.40 – "Wirtschaftsfunk": Mon–Fri 17.05.

FOREIGN SCE. on 1538kc: W 19.00–23.00.
19.00 Polish, 19.30 Czech, 20.00 Serbian/Croatian, 20.30 Roumanian, 21.00 Hungarian, 21.30 French, 22.00 English, 22.30 Danish, 22.40 Norwegian, 22.50 Swedish.
ANN: "Hier ist der Deutschlandfunk" – INT-SIG: "Du Land voll Lieb' und Leben" from the folksong "Ich hab' mich ergeben" (played on Celeste).



DEUTSCHE WELLE (Anstalt des öffentlichen Rechts)
ADDR: Bruederstr. 1, Postfach 344, 5 Köln. Te: 20301. Telex: 08/881942 – L.P: Intendant: Dr. Hans Otto Wesemann. Dir. Prgr: H. von Plato. Dir. Tec: G. Roessler. Dir. Adm: Dr. H. Fellhauer. Dir. Transcription: C. von Chmielewski. DX-Editor: G. G. Thiele.
Stations: Jülich DMQ – 7 × 100kW; Kigali/Rwanda (relay): 1 × 250kW.
G.C: Jülich 06.22E/50.57N – Kigali 30.07E/01.53S.
° Relay station Kigali/Rwanda. * used Nov–Feb only. ** used March/April only.

kc	m	kc	m	kc	m	kc	m
*5960	50.34	7290	41.15	**9765	30.72	15275	19.64
*6015	49.88	9530	31.48	11775	25.48	15295	19.62
6025	49.79	9545	31.43	11785	25.46	°15380	19.50
6075	49.38	°9565	31.36	11795	25.43	15405	19.47
6100	49.18	9575	31.33	11890	25.23	**15435	19.44
6120	49.02	9605	31.23	°11905	25.20	°17765	16.89
6145	48.82	9610	31.22	11925	25.16	**17815	16.84
6185	48.50	9640	31.12	11930	25.15	17830	16.83
7125	42.11	**9655	31.07	**11945	25.12	17845	16.81
7130	42.08	9675	31.01	11960	25.08	17870	16.79
7175	41.81	*9680	30.99	11965	25.07	**17875	16.79
7205	41.64	9685	30.98	15135	19.82	17880	16.78
7275	41.24	9715	30.88	15205	19.73	21650	13.86
7280	41.21	°9735	30.82	°15245	19.68		

OVERSEAS SERVICE
Abbreviations: I=Ea.Asia/Australia/New Zealand; II=So.Asia; III=No.Africa/M.East; IV=Europe; V=Africa; VI=We.Africa; VII=So.America (East); VIII=No.America (East); IX=C.America; X=No.America (West); XI=East Europe; XII=So.Europe.

GERMAN PRGR: * Relay st. Kigali.

H. of tr.	Area	Nov–Feb (kc)	March–April (kc)	N.
06.45–09.45	I	11795/15205/ 17880	11795/15205/ 17880	06.45, 09.35
06.45–09.45	IV	6100	6100	06.45, 09.35
12.50–15.50	II	11965/15275	15275/17875	12.50, 15.40
16.00–19.00	III	9545/11795	11795/15405	16.00, 18.50
16.00–19.00	IV	6075	6075	16.00, 18.50
17.15–20.15	V	11785/15275	11785/15275	17.15, 20.05
20.00–23.00	VI	15380*	15380*	20.00, 22.50
22.30–01.30	VII	9575/9735/11925	9735/11925/15435	22.30, 01.20
00.00–03.00	VIII	6100/9545/9680	6100/9545/9575	00.00, 02.50
01.45–04.45	IX	6145/9605	6145/9605	01.45, 04.35
03.00–06.00	X	6075/6100/9640	6075/6100/9640	03.00, 05.50

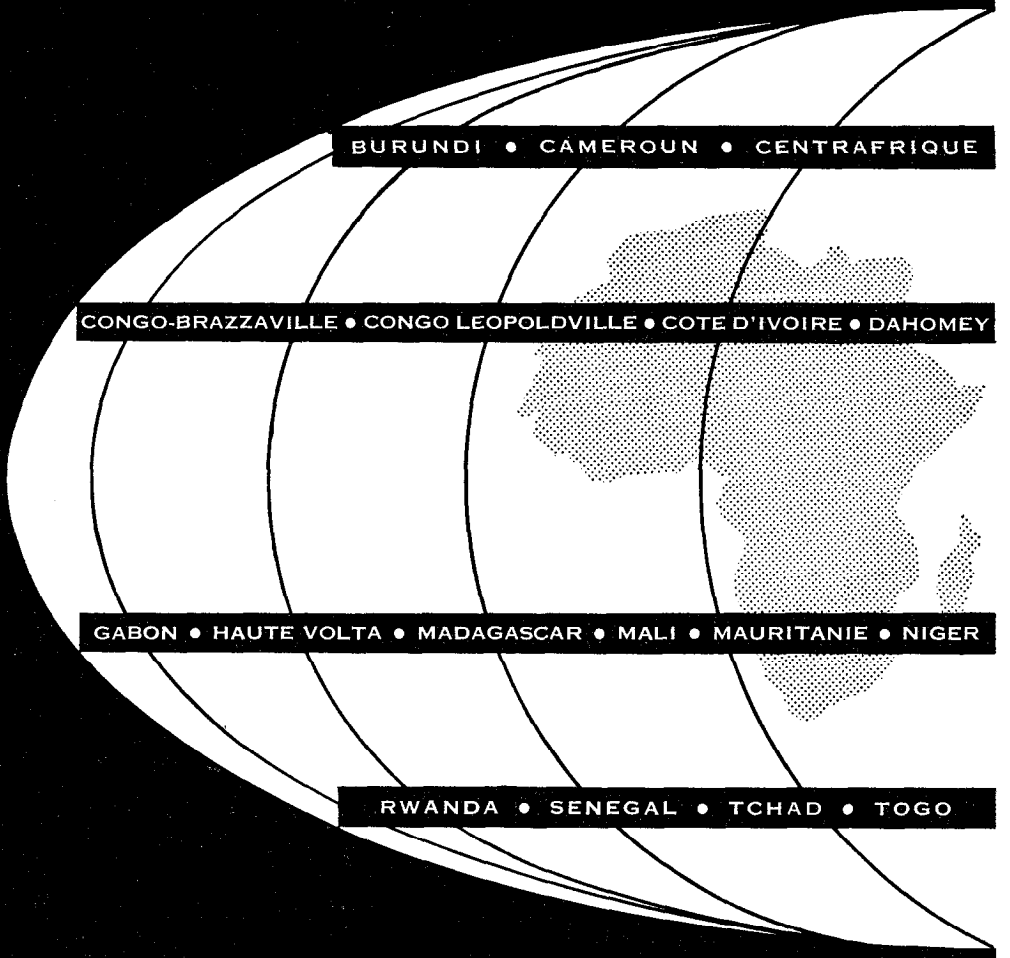
Comm: After first N – "Wie wir leben": Wed – "Unter uns gesagt": Wed – DX Prgr: (in German & English): Every second Mon/Tues: 09.15, 15.20, 18.30, 19.45, 22.30, 01.00, 02.30, 04.15, 05.30 – Technische Hinweise (in German): Every fourth Mon/Tues: Times as for DX-Prgr.

FOREIGN LANGUAGE PRGR: (Freq's in brackets used in March/April)

H. of tr.	Area	Nov–April (kc)	L.	N.
01.30–02.50	VIII	6075/9640	English	01.32
03.00–03.40	II	7175/9530	English	03.02
03.00–03.30	V	9565*	Amharic	03.02
03.45–04.30	V		Swahili	03.47
04.30–05.00	V	9565*	English	04.32
05.00–05.30	V		French	05.02
03.45–04.20	VII/IX	5960/9735	Spanish	03.47
04.25–05.50	III	7205/9610	Arabic	04.27
04.45–05.45	X	6145/9735	English	04.47
05.55–06.35	VII	6145/9735	Spanish	05.57
05.45–06.30	VI		English	05.47
06.30–07.00	VI	11905*	Hausa	06.32
07.00–07.45	VI		French	07.02

OCORA

OFFICE DE COOPÉRATION RADIOPHONIQUE


BURUNDI • CAMEROUN • CENTRAFRIQUE
CONGO-BRAZZAVILLE • CONGO LEOPOLDVILLE • COTE D'IVOIRE • DAHOMEY
GABON • HAUTE VOLTA • MADAGASCAR • MALI • MAURITANIE • NIGER
RWANDA • SENEGAL • TCHAD • TOGO

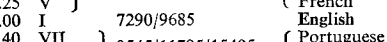
46 RUE D'AMSTERDAM - PARIS 9e - 744. 99-39

Société d'Etat de la République Française chargée d'apporter son assistance technique aux Etats Africains et Malgache dans le domaine de la radiodiffusion sonore et visuelle.

ORGANITEC PUBLICITE PARIS

H. of tr.	Area	Nov–April (kc)	L.	N.
06.00–06.30	V	9605/11785/15275	English	06.02
06.30–07.00	V	(11785/15275/	Hausa	06.32
07.00–07.25	V	17845)	French	07.02
06.10–06.40	XII	9675/11795	Turkish	06.12
07.30–08.05	II	11785/15275/17845	Hindi	07.32
08.05–08.40	II		Urdu	08.07
08.45–09.40	I	11925/15275/17845	English	08.47
09.45–10.45	V	9735*	Swahili	09.47
10.45–11.15	V		English	10.47
11.15–11.45	V		French	11.17
09.50–10.40	III	17845/21650	Persian	09.52
09.55–10.30	V	11930/15275/17870	Swahili	09.57
10.30–11.00	V		Amharic	10.32
11.00–11.15	V		English	11.02
11.15–11.30	V		French	11.17
11.30–11.45	V		Hausa	11.32
10.45–10.55	VIII	9605/11905	English	10.47
11.00–12.00	XI	9640/11965	Rumanian	11.02
11.05–12.05	XI	6145/7205	Czech/Slovak	11.07
11.50–12.45	I	15135/17845	Mandarin	11.52
12.00–12.45	VI	17765*	English	12.02
12.45–13.15	VI		Hausa	12.47
13.15–14.00	VI		French	13.17
12.10–13.20	I	11795/15405/17830 (15405/17830/21650)	Indonesian	12.12
12.20–13.20	XI	9640/11890	Bulgarian	12.22
13.30–14.30	XI	6075/7275/9640	Hungarian	13.32
13.30–15.00	XI	7205/9735	Polish	13.32
14.15–14.45	V	15245*	Amharic	14.27
14.40–15.50	XI	7275/9640	Serbo/Croat**	14.42
15.00–16.15	V	9735*	Swahili	15.02
16.15–16.45	V		French	16.17
16.45–17.30	V		English	16.47
15.10–16.10	XI	7130/9715/11960 (9715/11960/15405)	Russian	15.12
15.50–16.20	II	9530/11775 (11775/15295)	English	15.52
16.20–17.05	XI	6025/7280	Czech/Slovak	16.22
16.25–17.20	III	11890/15295 (15295/17815)	Persian	16.27
17.25–17.55	XII	9640/11925 (11925/15245)	Turkish	17.27
17.45–18.30	VI	17765*	English	17.47
18.30–19.00	VI		Hausa	18.32
19.00–19.45	VI		French	19.02
18.00–19.30	XI	6015/7130 (7130/9765)	Russian	18.02
19.10–20.35	III	7125/9735/11795 (9655/9735/11795)	Arabic	19.12
19.40–20.30	XII	6120/9605	Spanish	19.42
20.40–21.30	XII	6120	Portuguese	20.42
20.45–21.30	XI	6185/7125	Rumanian	20.47
20.50–21.00	VIII	6145/9735/11925 (9735/11925/15405)	English	20.52
21.05–21.25	V	9735/11925	Amharic	21.07
21.25–21.45	V		Swahili	21.27
21.45–22.05	V		English	21.47
22.05–22.25	V		French	22.07
21.10–22.00	I	7290/9685	English	21.12
21.40–22.40	VII	9545/11795/15405	Portuguese	21.42
22.40–23.50	VII/IX		Spanish	22.42

* Relay St. Kigali – ** 15.20–15.40 Slovenian (Tues/Thurs/Sat).:
ANN: G: "Hier ist die Deutsche Welle". E: "This is R. Deutsche Welle, the Voice of Germany". F: "Ici la Voix de l'Allemagne". Sp: "Habla la Voz de Alemania". P: "Esta é a Voz de Alemanha".
INT-SIG: Motif from "Fidelio" by Beethoven: "Es sucht der Bruder seine Brüder" played on Celeste.



V. by QSL-card (10 min. prgr. details required). Recordings accepted – **PUB:** Monthly Prgr.sched. free.

BAYERISCHER RUNDFUNK (Anstalt des öffentlichen Rechts).

ADDR: 8 München 2, Rundfunkplatz 1. **Cable:** Bayernfunk München. **Te:** 59001 – **L.P:** Intendant: Chr. Wallenreiter. Prgr. Dir: W. von Cube. Dir. Adm: H. Spies. Dir. Tec: Dr. F. Daser.

HOME SERVICE

FIRST PRGR. on all frequencies: W 04.30(Sat, Sun 05.00)–24.00 (exc. 08.55–09.35 m.w. only). * night only. [1] Passau.

M.waves:	kc	m	kW		kc	m	kW
Bayreuth	520	577	0.2	low power[1]	520	577	0.2*
Würzburg	520	577	0.2	**München**	800	375	100
Nürnberg	1602	187	20/40	Kirchheim	1602	187	20*
Hof	1602	187	1	Coburg	1602	187	1
Land./Isar	1602	187	20*	Regensburg	1602	187	1*

Short Wave (G.C: 11.45E/48.15N): DMR24 6085kc 49.30m 10kW: 04.30(Sat/Sun 05.00)–23.05.

FM:	ch	Mc	kW	FM:	ch	Mc	kW
Berchtesgaden	3	87.8	0.3	Wendelstein I	22	93.7	100
Lindau I	4	88.1	0.4	Garm. Partenk. I	22	93.5	0.5
Herzogstand I	4	88.1	0.1	Bamberg I	26	94.8	6
Dillberg I	6	88.9	24	Aschaffenburg I	29	95.6	17
Landshut I	11	90.2	0.1	Ochsenkopf	30	96.0	100
Grünten/Allgäu	12	90.7	100	Fichtelg. I			
München I	14	91.3	3	Hoher Bogen	33	96.8	30
Hühn. b.Hb.	16	91.9	6	Traunstein Hb.	37	98.0	2
Bad Reichenh.	19	92.8	0.3	Kreuzb./Rhön I	38	98.3	100

N. Wrp: W 05.00, 06.00, 07.00, 11.00, 12.00, 16.00, 18.00, 20.00, 22.00, 23.00. Sun 06.00, 07.00, 12.00, 16.00, 18.00, 20.00, 22.00, 23.00 – **"Cronik des Tages":** W 17.00 – **Request Prgr:** Wed 18.25. **Night Prgr:** D 00.00–04.20 on 520kc (Bayreuth, Kempten, Würzburg) 1602kc (Nürnberg, Kirchheim, Landau/Isar, Hof, Coburg) and on all FM st's exc. 96.0Mc – **N:** 00.00, 01.00, 02.00, 03.00, 04.00 – **T.S:** 11.00, 17.00, 23.00 – **N. in English, French, German:** 08.00.

SECOND PRGR: Mon–Fri: 04.30–08.50, 09.30–24.00. Sat, Sun: 05.00–24.00 – **Relay First Prgr:** 04.30–05.05, 06.00–07.15, Mon–Fri: 11.05–12.00, Wed, Fri, Sat: 23.00–24.00, Sun: 05.00–06.05, 23.00–24.00.

	ch	Mc	kW		ch	Mc	kW
Gelbelsee	2	87.6	10	Ochsenkopf/	12	90.7	100
Tegernseer Tal	2	87.7	0.3	Fichtelgeb. II			
Augsburg	3	87.9	0.75	Berchtesgaden	14	91.2	0.3
Büttelb/Frankh.	4	88.2	7	Brotjacklriegel	17	92.1	100
Coburg	4	88.3	2	Lindau	17	92.0	0.4
Aschaffenb. II	5	88.4	6	Dillberg II	18	92.3	24
München II	5	88.4	3	Hohe Linie	20	93.0	8
Grünten/Allgäu	6	88.7	100	Kreuzb./Rhön II	20	93.1	100
Würzburg	7	89.0	2	Passau	21	93.2	0.3
Garm.-Partenk.	7	89.2	0.5	Hoher Bogen II	25	94.4	2
Wendelstein II	8	89.5	100	Herzogstand II	33	97.0	0.1
Bamberg II	9	89.6	6	Landshut II	36	97.8	0.1
Hohenpeissenb.	10	89.9	8	Reichenhall	42	99.5	0.3

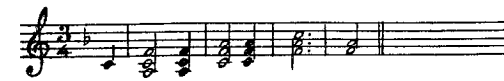
N: W 05.00, 06.00, 07.00, 11.00, 17.00, 19.00, 21.00, 23.00, Sun 06.00, 11.05, 19.00, 21.00, 23.00 – **Request Prgr:** Sun 13.00.

THIRD PRGR: Grünten III ch29 95.8Mc 100kW, München III ch34 97.3Mc 3kW, Dillberg III ch36 97.9Mc 12kW.

For foreign workers: 17.00 Turkish, 17.45 Italian, 18.30 Spanish, 19.15 Greek.

ANN: "Hier ist der Bayerische Rundfunk". E: "This is der Bayerische Rundfunk" – **V.** by QSL-card or letter.

INT-SIG:

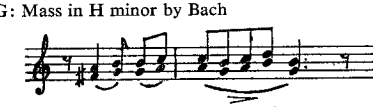


PUB: "Pressedienst" (weekly) – **AD:** Mon–Fri 05.25–06.00, 08.20–09.00, 12.45–13.30; Sat 05.25–06.00, 06.45–07.00.

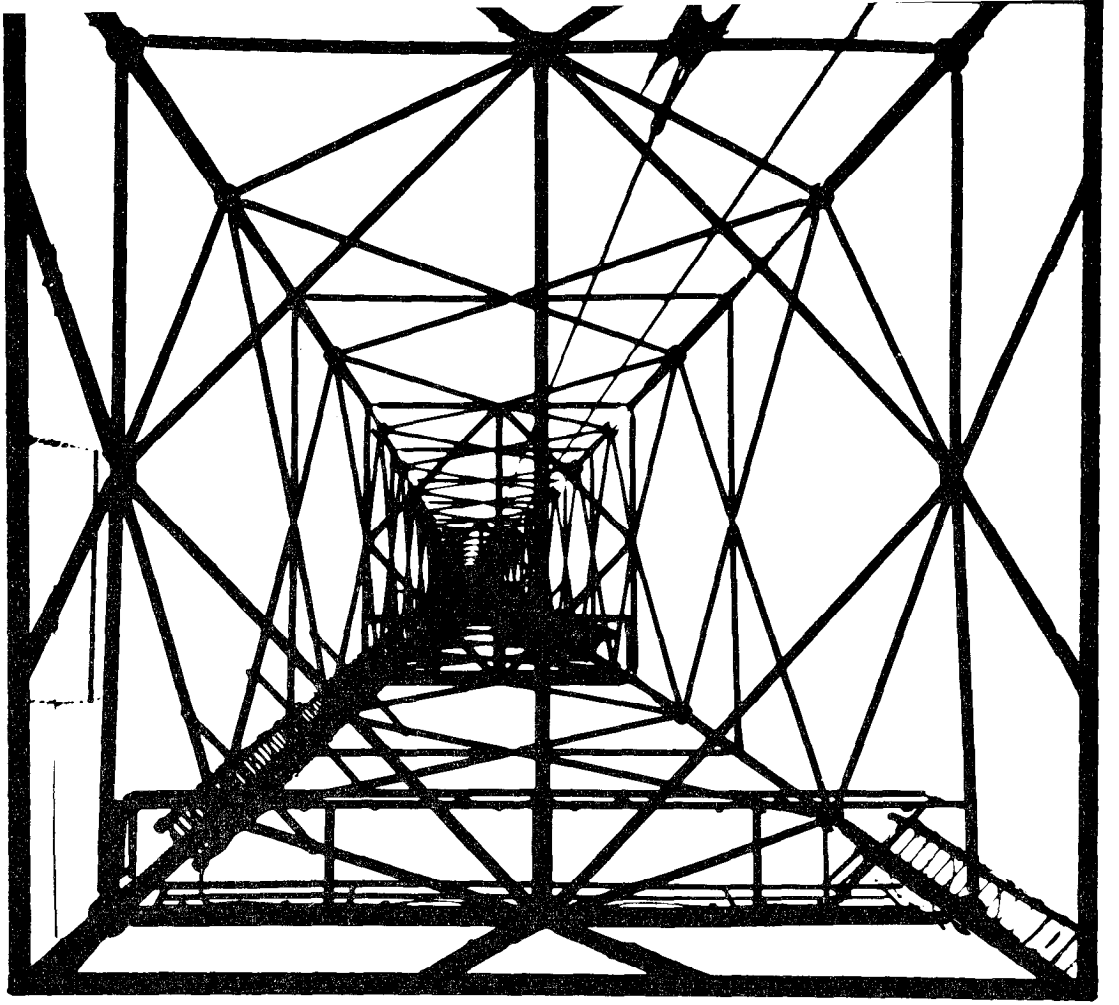
RADIO BREMEN (Anstalt des öffentlichen Rechts)

ADDR: Heinr. Hertz Str. 13, Bremen. **Te:** 230041. **Cable:** Radio – **L.P:** Intendant: H. Kerneck. Dir. Prgr: H. Abich. Dir. Tec: H. Heyer. Dir. Adm: H. Oliver.

HOME SCE: First Prgr: 05.00(Sun 06.00)–23.10
Bremen 1358kc 221m 20kW – Bremerhaven 1079kc 278m 5kW 6190kc 48.47m 10kW (G.C: 08.53E/53.07N): D 07.00–23.05.
FM: Bremen I ch23 93.8Mc 100kW – Bremerhaven I ch8 89.5Mc 5kW **N, Wrp, Comm:** W 05.05, 05.30, 06.00, 06.30, 07.00, 12.00, 15.00 (Sat only), 15.30, 17.00(exc. Sat), 18.30, 21.00, 23.00. Sun 07.00, 12.00, 18.30, 21.00, 23.00.
Second Prgr: Mon–Thurs 16.30–22.05, Fri 15.30–22.10, Sat 15.05–23.10, Sun 09.00–22.00 (exc. 12.00–15.00).
Bremen II ch4 88.3Mc 100kW – Bremerhaven ch17 92.1Mc 5kW. **N:** W 18.00, 20.00, 22.00(exc. Sat). Sun 09.00, 22.00 – **L.L:** English: Tues 14.15, Wed 08.45, 14.00, Thurs 08.30, 14.00*, Fri 08.30* – **French:** Thurs 14.00*, Fri 08.30* – *=fortnightly.
ANN: "Hier ist R. Bremen mit dem ersten bzw. zweiten Programm".
INT-SIG: Mass in H minor by Bach



V. by QSL-card. Rp. Re. in E, F, or G – **PUB:** Prgr.sched. free on request to Pressetelle, Radio Bremen.
AD: Mon–Fri: 06.05–06.30, 06.35–07.00, 11.00–11.54, 12.25–13.25 Sat 06.05–06.30, 06.35–07.00, 12.10–13.15.



DEUTSCHE WELLE

Information and entertainment in 28 languages: German – English – French – Spanish – Portuguese – Arabic – Persian – Swahili – Hausa – Amharic – Indonesian – Chinese – Hindi – Urdu – Sanskrit – Russian – Polish – Hungarian – Serbo/Croat – Slovenian – Czech – Slovak – Bulgarian – Roumanian – Turkish – Greek – Italian –

DEUTSCHE WELLE

5 Köln

Brüderstr. 1

P. O. B. 344

Federal Republic of Germany

HESSISCHER RUNDFUNK (Anstalt des öffentlichen Rechts)

I = Prgr. II = Prgr. II; III = Prgr.

ADDR: 6000 Frankfurt (Main) 1, Postfach 3294, Bertramstr. 8. **Cable:** Hessfunk. **Te:** 59051. **Telex:** 0411127 – **L.P:** Intendant: W. Hess. Dir. Adm: Dipl. Kfm: H. Weber. Chief Legal Adviser: W Lehr. Publicity: R. Weigand. Press: G. Zimmermann. Dir. Prgr(Radio): Dr. H. Wicht. Dir. Prgr(TV): H. Otto Grünefeldt. Dir. Tec: Dr.-Ing. F. Miseré, Politic & N: Chief Editor O. Herr. Culture: Dr. A. Frisé. Educ: Dr. G. Kadelbach. Music: Dr. H. W. Kulenkampff. Entertainment: W. Jaspert. Dir. N: F. F. Sackenheim.

STATIONS: Prgr. I * Stereo.
Frankfurt 593kc 505.8m 100kWd – Meissner 593kc 505.8m 20kWd.

FM:	ch	Mc	kW	FM:	ch	Mc	kW
Würzburg	4	88.1	0.25	Feldberg*	32	96.7	10
Biedenkopf	13	91.0	10	Würzburg	35	97.4	0.25
Rimberg	14	91.25	3	Biedenkopf	42	99.6	10
Hardberg	12	90.6	3	**Prgr. III:**			
Feldberg	25	94.4	10	Biedenkopf	2	87.6	0.4
Meissner	40	99.0	10	Feldberg	8	89.3	10
Prgr. II:				Meissner	8	89.5	10
Rimberg*	27	95.0	3	Hardberg	19	92.65	0.25
Hardberg*	28	95.3	3	Rimberg	36	97.7	3
Meissner*	28	95.5	10				

HOME SCE: Two prgr's day and night. The night prgr. at 23.10–05.00 only 593kc (Frankfurt or Meissner) – **N.** every h on the h – **Wrp:** after N – **L.L:** English/French: Sat 08.25 (II).
Third Prgr: D 16.00–21.50 for Italian, Turkish, Spanish and Greek workers in the Fed. Rep. **ANN:** "Hier ist der Hessische Rundfunk" or "Hier ist Frankfurt".
INT-SIG: Electronic music – **V.** by QSL-card – **PUB:** Prgr. schedule, press releases (half yearly, yearly and weekly) – **AD:** W 07.15–08.00 (I+II), 09.10–09.30(II), 10.10–10.30(I), 11.10–12.00(II), 12.10–13.00 (I).

NORDDEUTSCHER RUNDFUNK

(Anstalt des öffentlichen Rechts)
ADDR: Hamburg 13, Rothenbaumchaussee 132/34. **Cable:** Nordfunk. **Te:** 441931. Funkhaus Hannover: Rudolf-von-Bennigsen-Ufer 22; Landesstudio Kiel: Wall 74. **Studios:** Flensburg: Friedrich-Ebert-Str. 1 – Oldenburg: Oldenburg i.O. Jägerstr. 30 – Berlin: Berlin-Grunewald, Hubertusallee 26.
L.P: Intendant: G. Schröder. Deputy: L. Frhr. v. Hammerstein. Dir. Prgr.(Radio): F. Reinholz. Financial Dir: G. Schulz. Dir. Tec: Dr. H. Rindfleisch. Justitiar: J. Frels. Dir. Funkhaus Hannover: Dr. E. G. Mahrenholz. Presse/Information/Ausland: M. Jenke.

HOME SERVICE

FIRST PRGR: D 03.55(Sun 04.58)–00.15(Sat 0.15). **Night Prgr on** 971kc(Hamburg), 1570kc(Osnabrück), 701kc(Flensburg), 520kc (Braunschweig) & FM: 89.9/91.2/92.4Mc: Sun, Mon, Fri 00.15–03.30. Sat 01.15–04.30. **N:** 01.00, 02.00, 03.00.

	kc	m	kW		kc	m	kW
Braunschweig	520	577	2	Flensburg	701	428	5
Aurich	701	428	2	Hannover	971	309	40
Lingen	701	428	2	Kiel	1570	191	5
Göttingen	971	309	5	Oldenburg	971	309	40
Hamburg	971	309	300	Osnabrück	1570	191	5

FM Stations (relay m.w. prgr. exc. night prgr.):

	ch	Mc	kW		ch	Mc	kW
Göttingen	5	88.55	1.2	Oldenburg	14	91.1	70
Bungsburg	10	89.9	4.5	Dannenb.	14	91.2	15
Harz	10	89.9	100	Kiel	14	91.3	3
Aurich	10	90.05	25	Osnabrück	18	92.4	2
Hamburg	11	90.3	80	Lingen	19	92.8	15
Heide	12	90.5	15	Lübeck	20	93.1	0.06
Hannover	13	90.9	3	Flensburg	21	93.2	15

N.Wrp: 05.00(W), 06.00, 07.00, 07.45(Sun), 07.55(Sun 08.00), 11.00 (W), 12.00, 15.00, 16.00(Mon–Fri), 18.00, 20.30, 23.00 – **Rlg:** Sun 09.00, W 05.50.

SECOND PRGR: 05.00(Sun 07.00)–23.05.

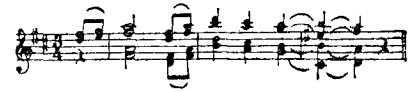
	ch	Mc	kW		ch	Mc	kW
Flensburg	9	89.6	15	Dannenberg	31	96.4	15
Lingen	11	90.2	15	Bungsberg	36	97.8	4.5
Göttingen	24	94.1	1.2	Harz	37	98.0	100
Oldenburg	25	94.4	70	Hannover	39	98.7	3
Kiel	25	94.5	3	Osnabrück	39	98.8	2
Lübeck	29	95.7	0.06	Hamburg	41	99.2	80
Aurich	29	95.8	25	Heide	41	99.4	15

N: 06.30(W), 07.00(Sun), 07.30(W), 11.00(W), 18.55, 21.30.

THIRD PRGR. (1/10–31/5 only): D: 19.00 – approx. 23.00. **N:** 19.00 & approx. 23.00.

	ch	Mc	kW		ch	Mc	kW
Hamburg	2	87.6	80	Bungsberg	16	91.9	4.5
Osnabrück	7	89.2	2	Harz	17	92.1	100
Lübeck	13	90.9	0.06	Dannenburg	21	93.3	1.2
Flensburg	30	96.05	3	Lingen	36	97.8	1.25
Göttingen	30	96.1	1	Aurich	37	98.15	25
Heide	31	96.3	15	Kiel	38	98.3	3
Hannover	30	95.9	3	Oldenburg	43	99.8	70

Prgr. for Foreign workers:
Braunschweig ch2 87.7Mc 0.5kW, Hannover ch19 92.65Mc 0.3kW, Hamburg ch33 97.05Mc 0.35kW.
ANN: 1st Prgr: "Hier ist das Erste Programm des Norddeutschen Rundfunks" – 2nd Prgr: "Hier ist das Zweite Programm des Norddeutschen Rundfunks" – 3rd Prgr: "Hier ist das Dritte Programm des Norddeutschen Rundfunks und des Senders Freies Berlin".
INT-SIG: 1st Prgr: Motif from the first movement of Johs. Brahms' Symphony no. 2.



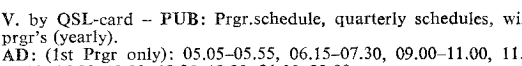
2nd Prgr: "Einen zerlegten Nonen-Akkord" – **3rd Prgr:** The tones "B-A-C-H" in Regerharmonization – **V.** by QSL-card – **PUB:** "Die Ansage" (weekly) Prgr.sched. (weekly).

EUROPE NO. 1 (Comm.)

ADDR: Europäische Rundfunk und Fernseh AG, Europa Nr. 1, 6600 Saarbrücken, P.O. Box 301. **Te:** 2.41.62 – **L.P:** Mgr: F. Billmann. **For Programmes:** Télécompagnie 26 bis, Rue Francois Ier. Paris 8e. **Cable:** Euradio. **Te:** Alma 9000. **L.P:** Pres: S. Floirat. Gen.Mgr: M. Siegel – **For Advertisements:** Regie No. 1, 28, Rue Francois Ier, Paris 8e. **L.P:** Gen. Mgr: J. Frydman.
STATION (System CFTH): Felsberg 180kc 1667m 400/1000kW.
HOME SCE. in French: 05.00(Sun 05.30)–24.00. **N:** W Every h from 05.00, also at 05.30, 06.30, 11.30, 18.30. Sun: Every h from 06.00, also 05.30, 11.30, 18.30.
ANN: F: "Ici Europe No. 1" – **V.** by QSL-card. Re. to Europe No. 1, 663 Saarlouis, P.O. Box 209, Germany.

SAARLÄNDISCHER RUNDFUNK

(Gemeinnützige Anstalt des öffentlichen Rechts)
ADDR: 66 Saarbrücken, Postfach 1050. **Te:** 1050. **Cable:** Radio Saarbrücken. **Telex:** 4428977. **L.P:** Intendant: Dr. Fr. Mai. Chefredakteur u. stellv. Intendant: W. Diederich. Prgr. Dir: Dr. W. Zilius. Tech. Dir: Chief Eng: E. Böhnke. Verwaltungs Dir: Dipl. Volkswirt H. Fünfgeld.
STATIONS: Heusweiler 1412kc 211m 400kW. **FM:** Göttelborner Höhe: I ch3 88.0Mc 100kW – II ch14 91.3Mc 100kW – III ch28 95.5Mc 100kW.
HOME SCE. in German
1st Prgr (mw + FM I): Mon-Fri 04.00–00.05; Sat 04.00–Sun 04.59; Sun 05.00–00.05.
N, Wrp: W 05.00, 06.00, 07.00, 12.00, 13.00, 15.00, 16.00, 17.00, 18.00, 21.00, 22.00, 23.00, 00.00 (Sat 01.00, 02.00, 03.00, 04.00). Sun 06.00, 07.00, 12.00, 16.00, 17.00, 18.00, 21.00, 22.00, 23.00, 00.00.
Prgr II(FM): Mon–Fri 17.00–22.00, Sat 13.30–22.00, Sun 07.15–13.00, 14.00–21.00. **N:** W 21.30. Sun 11.30, 18.50, 21.00.
ANN: "Hier ist der Saarländische Rundfunk auf Wellenlänge 211m bzw. auf Ultrakurzwellen 88.0, 91.3 und 95.5MHz".

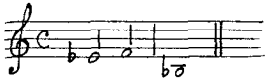


V. by QSL-card – **PUB:** Prgr.schedule, quarterly schedules, winter prgr's (yearly).
AD: (1st Prgr only): 05.05–05.55, 06.15–07.30, 09.00–11.00, 11.30–13.30, 16.00–18.00, 18.35–19.00, 21.00–23.00.

SENDER FREIES BERLIN (Anstalt des öffentlichen Rechts)

AD: W 05.30–06.40, 10.00–11.15, from 16.30 – **ADDR:** Masuren Allee 8–14, 1 Berlin 19. **Cable:** Sender Freies Berlin. **Te:** 30331 **L.P:** Vorsitzender d. Rundfunkrates: Dr. F. Suchan. Intendant: W. Steigner. Dir. Prgr: E. Schütz. Dir. Tec: U. Blässer. Dir. Adm: H. Koch.
HOME SCE:
Berlin 1st Prgr. *566kc 530m 20/100kW – **FM:** 88.75Mc 10kW
Berlin 2nd Prgr. 1484kc 202m 5kW – **FM:** 92.4 Mc 10kW
Berlin 3rd Prgr. **FM:** 96.3Mc 10kW.
* 01.00 until sunset 100kW, sunset until 01.00 20kW.
Mainprgr: Mon–Fri 03.58–03.30, Sat 03.58–04.30, Sun 04.58–03.30 on 566kc, 88.75Mc, also on 1484kc, 92,4 & 96.3Mc if not used for other prgr's.
N, Wrp: 04.00(W), 05.00(W), 06.00, 07.00(W), 08.00(Sun), 09.00, 10.00(W), 12.00, 14.00(W), 15.00(Sat), 16.00(not Sat), 18.00, 21.00, 23.00 – **Business N:** 13.55(Mon–Fri) – **Comm:** 21.10 – **Actualities:** 17.30(Mon–Fri) – **Kurzwellenbummel:** Every 4th Sat. 22.45–23.00.

Berlin Musik: Mon–Fri 15.00–22.00 on 92.4Mc – N: 16.00, 17.00, 19.00, 20.00, 21.00.
3rd Prgr. NDR/SFB: Mon–Fri 17.45–22.00(approx.) Sat 17.30–22.00(approx.) Sun 18.00–22.00(approx.) on 1484kc/96.3Mc.
Week-end Prgr: Sat 06.58–22.05; Sun 06.58–22.10 on 92.4Mc – N: Sat 07.00, 12.00, 14.00, 17.00, 22.00; Sun 07.00, 13.00, 17.00, 22.00.
ANN: "Hier ist der Sender Freies Berlin mit dem Hauptprogramm. Programme Berlin–Musik... Gemeinschaftsprogramm SFB/NDR".
INT-SIG: Cembalo:



V. by QSL-card – **PUB:** "Vorschau" (weekly).

SÜDDEUTSCHER RUNDFUNK

(Anstalt des öffentlichen Rechts)
ADDR: 7000 Stuttgart-1 P.O. Box 837. **Cable:** Rundfunk, Stuttgart. **Te:** 299701. **Telex:** 0723456.
Studios: Heidelberg-Mannheim: Heidelberg, Marstallstr. 6, Karlsruhe: Kriegsstr. 168 – **L.P:** Vorsitzender des Rundfunkrats: Dr. Valentin Gaa, Landrat, Mannheim. Vorsitzender des Verwaltungsrats: Dr. rer. nat. h. c. Dr. ing. e. h. Alex Möller, Generaldir. (MdB), Karlsruhe, Intendant: Dr. Hans Bausch. Programmdir: Dr. Peter Kehm. Verwaltungsdir: Friedrich Müller. Technischer Dir: Dr. Helmut Rupp. Dir. TV: Horst Jaedicke.
HOME SCE: Mw Prgr (rel by sw and FM): Sun 04.55–24.00. Mon 03.51–03.45. Tues, Thurs 03.56–23.15. Wed 03.56–03.55. Fri 03.56–03.45. Sat 03.56–24.00. No break in tr's.

Stations	kc	m	kW		kc	m	kW
Mühlacker	575	522	300	Bad Mergenth.	1412	212	3
Heidelberg				Wertheim	1484	202	0.2
Dossh.	998	301	10	Heidenheim	1484	202	0.2
BuchenWalldürn	998	301	0.2	Bopfingen	1484	202	0.2
Ulm-Jungingen	1169	257	5	Adelsheim	1484	202	0.2
Heilbronn-Obereisesh.	1169	257	10				

Short Wave: Mühlacker: 6030kc 49.75m 20kW.
G.C: 08.51E/48.57N: 03.55(Sun 04.55)–23.15(Sat/Sun 24.00).

FM:	ch	Mc	kW		ch	Mc	kW
Stuttgart I	26	94.7	100	Aalen I	27	95.1	50
Waldenburg I	39	98.8	100	Geislingen I	28	95.5	0.5
Heidelberg I	36	97.8	100	Ulm I	25	94.5	1

N: 04.30, 05.00, 06.00, 07.00, 08.00, 11.30, 16.00, 17.00, 18.00, 21.00, 23.00.

FM: 2nd Prgr: Sun 04.55–23.10. Mon 03.51–23.15. Tues, Wed, Fri 03.56–23.15. Thurs 03.45–23.15. Sat 03.56–24.00. No break in tr's.

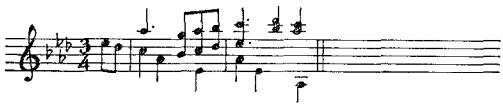
	ch	Mc	kW		ch	Mc	kW
Stuttgart II	10	90.1	100	Stuttgart IIF	3	88.0	0.5
Waldenburg II	23	93.8	100	Heidelberg II	6	88.8	100
Aalen II	14	91.1	50	Mühlacher	8	89.5	4.5
B. Mergenth. IIA	3	87.8	0.5	B. Mergenth. IIB	21	93.2	0.5
Geislingen II	20	93.0	0.5	Wertheim II	16	91.8	0.1
Ulm II	7	89.2	1.0	Buchen	16	91.9	0.1

N: 05.30, 06.30, 07.30, 12.00, 13.00, 16.30, 17.30, 18.30, 21.30, 23.00.

FM (3rd Prgr): For Foreign Workers and Stereo:

	ch	Mc	kW		ch	Mc	kW
Stuttgart III	17	92.2	100	Heidelberg III	43	99.9	100
Waldenburg III	32	96.5	100	Ulm III	35	97.4	1
Aalen III	37	98.1	50				

17.00 Turkish, 17.45 Italian, 18.30 Spanish, 19.15 Greek.
Stereo: W 08.00–08.30, 15.30–16.00(test), 16.00–16.55(music). Sat/Sun 20.00–21.00(music).
ANN: "Hier ist der Süddeutsche Rundfunk" – **INT-SIG:** The first notes of a Swabian folksong: "Jetzt gang i ans Brünnele"



V. by QSL-card. **AD:** W 05.15–06.00, 12.00–13.00.

SÜDWESTFUNK (Anstalt des öffentlichen Rechts)

ADDR: 7570 Baden-Baden, Hans-Bredow-Str. **Cable:** Südwestfunk Baden-Baden. **Te:** 761 – **Studios:** 7800 **Freiburg i Br:** Günterstal, Kyburg. 6500 **Mainz:** Deutschhausplatz 8. 7400 **Tubingen:** Matthias-Koch-Weg 7 – "Zweigstellen": 6750 **Kaiserslautern:** Fliegerstr. 36. 5400 **Koblenz:** Januarius-Zick-Str. 8. 7750 **Konstanz:** Wollmatingerstr. 39. 5500 **Trier:** Christophstr. 24. **L.P:** Vorsitzender des Rundfunkrates: J. Saxler, Daun. Vorsitzender des Verwaltungsrates: Dr. J. Knecht, Freiburg i Br. Intendant: H. Hammerschmidt. Programmdir. u. stellvertretender Intendant: G. Gaus. Tech Dir: Dr. H. J. v. Braunmühl. Verwaltungsdir: A. Manke. Justitiar: Dr. E. Wagner. Öffentlichkeitsarbeit: H. Scharfenberg. Leiter Studio Freiburg: E. Brugger. Dir. Studio Mainz: T. W. Zwermann. Leiter Studio Tübingen: A. G. Richter.

HOME SERVICE

Prgr. I: Sun 05.50–24.00, W 03.55–23.10 (Fri 24.00, Sat 01.00). **"Musik bis zum frühen Morgen"** on 1016 only (Rheinsender): Sun 00.00–03.40; Tues, Thurs 23.10–03.50; Sat 01.00–05.40.

M Waves:	kc	m	kW		kc	m	kW
Baden-Baden	827	363	1.5	Koblenz	827	363	0.5
Bodensee-sender	665	451	150	Rheinsender	1016	295	300
Freiburg	827	363	40	Trier	827	363	1
Kaiserslautern	827	363	3				

Short Wave: Rohrdorf (**GC:** 09.07E/48.01N): 7265kc 41.29m 1.5kW.
FM (with stereoprgr's):

	ch	m	kW		ch	m	kW
Baden-Baden	40	98.9	0.5	Koblenz	23	94.0	10
Blauen	19	92.6	8.4	Linz	35	97.4	18
Donnersberg	17	92.0	60	Marienberg	28	95.4	25
Eggberg	38	98.5	0.6	Potzberg	23	93.9	20
FeldbergiSchw.	36	97.9	1	Raichberg	16	91.8	12
Haardtkopf	20	93.0	25	Waldburg	26	94.9	18
Hochrheinsend.	14	91.1	0.07	Wannenberg	19	92.8	1
Hornisgrinde	31	96.2	60	Witthoh	11	90.4	37.5

N, Wrp: 04.00(W), 05.00(W), 06.00, 06.55, 09.00(W), 12.00, 16.00(W), 21.00, 23.00 – **"Tribüne der Zeit":** 18.30 – **Stereo Prgr's:** Wed 19.00–21.00.

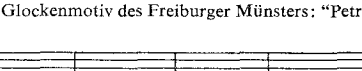
Prgr. II: Sun 05.50–24.00, W 03.55–23.10 (Fri 24.00, Sat 01.00).
FM (with stereoprgr's):

	ch	Mc	kW		ch	Mc	kW
Baden-Baden	13	90.9	0.5	Linz	18	92.4	18
Blauen	7	89.2	8.4	Mainz	15	91.4	0.035
Donnersberg	40	99.1	60	Marienberg	9	89.8	25
Eggberg	33	97.0	0.6	Potzberg	13	90.8	20
Eifel	14	91.1	8	Raichberg	4	88.3	12
FeldbergiSchw.	9	89.8	1	Waldburg	14	91.2	18
Haardtkopf	36	97.7	25	Wannenberg	7	89.0	1
Hochrheinsend.	3	88.0	0.07	WDR-Progr.	22	93.6	8
Hornisgrinde	22	93.5	60	Weinbiet	30	95.9	25
Koblenz	15	91.6	10	Witthoh	18	92.4	37.5

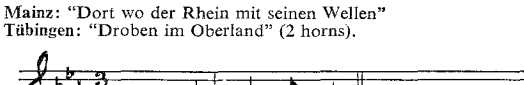
N, Wrp: 04.00(W), 05.30(W), 06.00(Sun), 06.30(W), 07.30(Sun,) 08.30(W), 11.00(Sat), 12.00(Sun), 19.00(W), 21.30, 23.00.
"Pressestimmen": Mon–Fri 11.00 – **Stereo Prgr's:** Thurs/Fri 19.10–20.30, Sat 08.00–08.30, 18.00–20.30, Sun 12.10–14.00, 18.30–21.30.
Prgr. III: Sun 10.50–20.00; W 06.57–07.30 (Wed/Thurs 07.42–08.20), 15.00–20.00.

FM	ch	Mc	kW		ch	Mc	kW
Donnersberg	10	89.9	30	Koblenz	30	96.05	10
FeldbergiSchw.	23	93.8	1	Raichberg	24	94.3	8
Hornisgrinde	38	98.4	9	Waldburg	39	98.7	1.5

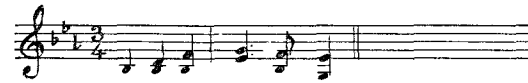
N, Wrp: W 15.00 – **L.L: English:** W 07.10–07.30 (Wed/Thurs 08.00–08.20).
ANN: "Hier ist der Südwestfunk. Über Mittelwelle und UKW I hören Sie... Über UKW II hören Sie...". – **INT-SIG: Baden-Baden:** Motif from Mozart's "Zauberflöte": "Bald prangt den Morgen zu verkünden" (Piano).



Freiburg: Glockenmotiv des Freiburger Münsters: "Petrus und Maria"



Mainz: "Dort wo der Rhein mit seinen Wellen"
Tübingen: "Droben im Oberland" (2 horns).



V. by QSL-card and letter. Rp.

WESTDEUTSCHER RUNDFUNK (WDR)

(Anstalt des öffentlichen Rechts)
ADDR: Wallrafplatz 5, Köln. **Te:** 20701. **Cable:** WDR.
Studios: 53 Bonn, Dahlmannstrasse 14; 4 Düsseldorf, Palmenstrasse 16; 46 Dortmund, Westenhellweg 86–88; 44 Münster, Ludgeriplatz; 48 Bielefeld, Lessingstrasse 3; 43 Essen, Lindenallee 56.
L.P: Intendant: Klaus von Bismarck. Dir. Tec: W. Werner.

HOME SCE: First Prgr: W: 04.55–09.30, 10.45–00.10; Sun 05.55–00.10. **Night Prgr** (on 971kc only): 00.10–04.50(Sat night 05.50).

Medium Waves:	kc	m	kW		kc	m	kW
Aachen/Stolb	701	428	5	Münster	1502	199.7	0.8
Herford	701	428	2	Bonn	971	309	5
Siegen	701	428	2	Kleve	971	309	3
Langenberg	1586	189	400				

FM. Common WDR and NDR mw prgr.

	ch	Mc	kW		ch	Mc	kW
Aachen-Stolb	3	88.0	5	Münster	17	92.0	6
Bonn	4	88.3	0.5	Nordhelle	11	90.3	15
Kleve	42	99.7	0.25	Siegen	34	97.1	0.5
Köln	3	87.8	0.5	Wittgenstein	6	88.7	15
Langenberg	6	88.8	100	Teutob. Wald	12	90.6	100
Monschau	2	87.7	0.04				

N, Wrp: W 05.00, 06.00, 07.00, 07.55, 11.00, 12.00, 15.00, 16.00 (W) no Wrp, 18.00, 20.30, 23.00; Sun: 06.00, 07.00, 07.45(Church N), 08.00, 12.00, 15.00, 18.00, 20.30, 23.00. In addition during "Music bis zum frühen Morgen" (5 mins. each) 01.00, 02.00, 03.00, 04.00 during night of Fri to Sat – **Comm:** Mon–Fri 12.10, 18.10, 20.45 – **Wrp:** Repeats of short version within music prgr's at 05.30, 06.30, 07.30.

Second Prgr: 04.55–23.00(Sat 24.00), Sun 05.55–23.00

	ch	Mc	kW		ch	Mc	kW
Aachen-Stolb	23	93.9	5	Monschau	24	94.2	0.04
Bonn	19	92.8	0.5	Münster	24	94.1	18
Eifel	22	93.6	6	Nordhelle	22	93.5	15
Kleve	21	93.3	0.25	Siegen	19	92.6	0.5
Köln	16	91.8	0.5	Teutob. Wald	21	93.2	100
Langenberg	27	95.1	100	Wittgenstein	18	92.3	15

N, Wrp: W 05.30, 06.30, 07.30, 11.30, 14.30, 17.00 (no Wrp), 1845, 21.30, 22.30; Sun 07.30, 11.45, 18.45, 21.30:

3rd Prgr: D 1845–21.30(approx), Sun also 14.30–17.00(approx).

	ch	Mc	kW		ch	Mc	kW
Langenberg	41	99.2	100	Kleve	34	97.3	0.2
Münster	9	89.7	6	Köln	29	95.7	0.3
Nordhelle	37	98.1	15	Monschau	37	98.2	0.04
Teutob. Wald	33	97.0	100	Siegen	34	97.1	0.5
Bonn	12	90.7	0.5	Wittgenstein	29	95.8	15
Aachen-Stolberg	30	95.9	5				

N: D 18.45.

Prgr. for foreign Workers: D 16.55–20.00 Aachen-Stolberg ch 30 95.5Mc 5kW, ch 52 102.5Mc 0.5kW. Langenberg ch 45 100.4Mc 50kW – Teutoburger Wald ch 33 97.0Mc 100kW (17.45–18.30 only Sun–Fri). Stereo-Transmissions (in 3rd Prgr. only): Sat 17.00–18.30. Sun ch4 *88.1Mc 3kW. 19.00–21.30 (approx).*

ANN: MW-Prgr: "Westdeutscher Rundfunk Erstes Programm" – FM-Prgr: "Westdeutscher Rundfunk, Zweites Programm", "Westdeutscher Rundfunk, Drittes Programm".

INT-SIG: M.W. Prgr: Motif from "In allen guten Stunden" (L. van Beethoven). Electronic instrument.

V. by QSL-card or letter. Re. to Technische Direktion.

RIAS–BERLIN (Berlin West)

ADDR: 1 Berlin 62, Kufsteiner Str. 69. **Cable:** Rias-Berlin. **Te:** 21301 – **L.P:** Dir: R. H. Lochner. Pol. Dir: R. Müllerburg. Dir. Prgr: H. Kundler. Dir. Tec: A. Pösniker. Dir. Adm: P. Naegele. Dir. Listeners Rel. and Press: H. Kirstaedter.

STATIONS: [1]=RIAS I, [2]=RIAS II, [3]=VOA (RIAS II).

	kc	m	kW	summer h. of tr.	winter
Berlin-Britz[2]	683	439	100	03.55–16.44	06.50–15.40
Hof[2]	683	439	40d	16.45–01.05	03.55–06.50 15.41–01.05
Hof[2]	737	407	40	03.55–16.44	06.51–15.40
Berlin-Britz[2]	854	351	100d	16.45–23.15	03.55–06.50 15.41–23.15
Berlin-Britz[1]	989	303	300	03.00–00.15	03.00–00.15
			100	00.15–03.00	00.15–03.00
Berlin-Britz[3]	6005	49.96	20	16.45–03.45	15.41–03.45
München[3]	6005	49.96	100	03.55–16.44	03.55–15.40

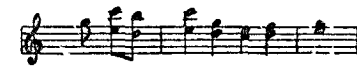
(G.C: Berlin 13.20E/52.30N – München 11.45E/48.15N)

FM: Berlin-Britz[2] 89.6Mc 30kW – [1] 94.3Mc 50kW, Hof[2] 91.2Mc 20kW. **D.PRGR:** 24 h – Prgr. separation into RIAS I and RIAS II: Sun 07.00(Sat 13.30)–23.00, Mon–Fri 09.00–09.45, 14.00–14.45, 17.00(Fri 16.00)–23.00. All other times common prgr. (RIAS I+RIAS II). **N, Wrp:** 00.00, 01.00, 02.00, 03.00, 04.00, 04.30, 05.30, 06.30, 07.30, 08.30, 10.30(W), 11.30(W), 12.30(W), 14.30(Mon–Fri), 15.30. **RIAS I:** 12.00(Sun), 17.00(W), 18.00(Sat/Sun), 18.30(Mon–Fri), 20.30(W), 21.00(Sun), 22.00(Mon–Fri), 23.00. **RIAS II:** 11.30(Sun), 18.00(Mon–Fri), *18.30*(Sat/Sun), *18.55*(Mon–Fri), *21.00*(W), *21.30*(Sun), *22.00* (Mon–Fri).

RIAS I: Comm: 17.10, 20.45(W) – **Rel VOA:** 16.45(Mon–Fri) – **Press review:** 06.40(Tues–Sat), 11.40(W) – **Actualities:** 03.55, 07.10, 12.40, 17.00(Sat/Sun), 18.35(Mon–Fri).

RIAS II: Comm: 18.10(W) – **Rel VOA:** 09.30(Wed) – **Actualities:** 14.00(Sun), 18.00(Sat), 21.00(W).

ANN: "Hier ist RIAS-Berlin" – **INT-SIG:** From a Trio Sonata



V. by QSL-card – **PUB:** Press service weekly RIAS educationbroadcast press service every six weeks – **FI:** By United States Informaton Agency.

ALLIED STATIONS

AMERICAN FORCES NETWORK (United States Army)

ADDR: American Forces Network, Europe APO 09757 or APO New York, NY 09757, N.Y. USA. **Te:** Frankfurt Mil. 7901 – **L.P:** Commanding Officer: Capt. E. H. Bickley, Acting OIC. Prgr. Dir: F. McLaughlin. Techn. Supervisor: F. C. Mortensen.

STATIONS:	kc	m	kW		kc	m	kW
Nürnberg*	611	491	10	Würzburg	1142	263	0.25
Grafenwöhr	611	491	10	Bamberg	1304	260	0.25
Kaiserslaut*	611	491	10	Berchtesgaden	1304	230	0.25
Frankfurt*	872	344	150	Heidelberg	1304	230	1
Berlin*	935	321	10	Regensburg	1304	230	0.25
Ansbach	1034	290	0.25	Fulda	1304	230	0.25
Bad Kissingen	1034	290	0.25	Wertheim	1304	230	0.25
Karlsruhe	1034	290	1	Augsburg	1394	215	1
Munich*	1106	271	100	Bitburg	1394	215	0.25
Stuttgart*	1142	263	10	Crailsheim	1394	215	0.25
Ulm	1142	263	1	Hof	1394	215	0.25
Goeppingen	1142	263	0.25	Garmisch	1502	199	0.25
Bremerhaven*	1142	263	5	Giessen	1502	199	0.25
Hersfeld	1142	263	0.25	Rothwesten	1502	199	0.25
Schweinfurt	1142	263	0.25	Wildflecken	1502	199	0.25

FM: Berlin 87.85Mc 1.5kW, Frankfurt 98.7Mc 55kW, Stuttgart *102.4Mc 10kW*, Augsburg *101.0Mc 15kW*. * *Studio Installations.* **D.Prgr:** 05.00 (Sun 06.00) – 00.05 (Berlin: 24 h) – **N:** Every h on the h (5min) + major newscasts (30min) at 06.00, 17.00, 21.00 – **Hymns from Home:** Mon–Fri 18.45 – **Request Shows:** 05.05, 06.30, 10.30, 11.15, 15.05, 16.05 – **Local N:** 17.25 – **Rel:** Sun 09.30 (Catholic), 10.05 (Protestant).

ANN: "This is AFN, The American Forces Network, Europe" announced at least every half h – **INT-SIG:** Every h on the h. AFN announces the time and the sixth and final pip is exactly on the h as announced – **V.** by QSL-card. Recordings not desired and will not be returned – **PUB:** Prgr. sched. (weekly) not available to individuals. The American Forces Network operates solely to provide American Forces in Europe with information, education and entertainment.

BRITISH FORCES BROADC. SCE. COLOGNE

is operated by Ministry of Defence to provide a sce. of inf, entertainment as well as a link with home for H.M. Forces in Germany. It is non-comm, does not accept adv – **ADDR:** BFBS Cologne, 5 Köln-Marienburg, Parkstr. 61. **Te:** 381757 Cologne Civil – **L.P:** St. Contr: P. Thurstan Holland. Tec. Dir: J. W. Bull. SPO: M. A. Pachebat.

FM-st's:	Mc	kW		Mc	kW		Mc	kW
Langenberg	96.5	50	Bonn	99.8	2	Berlin	98.75	1
Nordhelle	96.5	15	Herford	95.4	6	Drachenberg	93.0	80
Verden	97.6	50						

English: 05.30(Sun 07.00)–22.30(Sat 24.00).

N (from BBC): 07.00, 08.00, 12.00, 17.00(Sat/Sun only), 21.00. N. summaries on the half h hourly – **ANN:** "This is the British Forces Broadc. Sce. Germany" or "You are tuned to FBS in Germany" – **V.** by letter Rp – **PUB:** BFBS bulletin weekly.

RADIO CAE (Canadian Army Europe)

ADDR: CFPO 5050, 476 Werl – **L.P:** St.Mgr: H. Konow. Dir. Prgr: B. McMillan. Dir. Tec: Sgt. J. Mitchell – **STATION:** 87.8Mc 0.25kW. **D.PRGR'S in English &French:** Mon–Fri 05.30–23.00, Sat 09.00–24.00. Sun 09.00–23.00. **N** (relay CBC): 06.30, 12.00, 14.00, 16.40, 18.00, 21.30 – **L.L** (German Course): Mon–Fri 09.50 – **ANN:** "This is R. Canadian Army Europe".

RADIO FORCES FRANCAISES DE BERLIN (FFB)

Relay st. for entertaiment of French Forces in Berlin.

ADDR: Kurt-Schumacher-Damm, Quarter Napoléon, Berlin-Reinickendorf – **FM:** 93.6Mc 3kW: Continuously exc, from 08.00–09.00 (Mon) and Thurs 23.00–Fri 06.00 – **Rel:** RTF Programmes. **N:** 07.00, 12.00.

RADIO FREE EUROPE (Private, non-comm.)

ADDR: R. Free Europe, Division of the Free Europe Commit, 2 Park Avenue, New York 16, N.Y., USA. **Cable:** Natfecom, N.Y. **Te:** LExington 2-8900 – R. Free Europe Hqs, 1 Englischer Garten, Mün-

chen 22, Germany. **Cable:** Raduropa. **Te:** 229921 – **Raret** (Portugal relay base), Sociedade Anonima de R. Retransmissão, Av. Padre Manuel da Nobrega 8-B, Lisbon. **Cable:** Raretsa. **Te:** 721131.
L.P: Free Europe, Inc. (New York): Pres: John Richardson, Jr. RFE Hqs (Munich): Acting Dir: Ch. W. Ott. Dir. of Eng. and Sce's: P. W. Esten. New York Office: Dir: Ch. B. Kaufmann. Dep. Dir. Eng: W. H. Moffat. Portugal Office: Man. Dir. H. N. Black.
STATIONS: Medium Wave (System: Brown Boveri): Holzkirchen 719kc 417.2m 135kW.
Short Wave: 9 sw-tr's in Biblis, Germany (10/20/50kW), 18 sw-tr's near Lisbon, Portugal (4/250kW, 4/100kW, 8/50kW, 1/25kW & 1/10kW) and 4 sw-tr's near Holzkirchen, Germany (**G.C:** Biblis: 08.30E/49.41N; Holzkirchen: 11.44E/47.52N; Lisbon: 08.40W/39.30N.

kc	m	kc	m	kc	m	kc	m	kc	m
3960	75.75	6160	48.70	9505	31.56	11805	25.41	15355	19.54
3970	75.57	6185	48.50	9520	31.51	11815	25.39	15365	19.53
3990	75.19	7105	42.22	9595	31.27	11820	25.38	15405	19.47
3995	75.09	7115	42.16	9605	31.23	11830	25.36	15420	19.46
5960	50.37	7140	42.02	9635	31.14	11840	25.34	17725	16.93
5965	50.29	7145	41.99	9655	31.07	11855	25.31	17735	16.92
5970	50.25	7155	41.93	9670	31.02	11885	25.31	17770	16.88
5985	50.12	7165	41.87	9695	30.95	11895	25.22	17805	16.85
5990	50.08	7175	41.80	9705	30.91	11915	25.17	17835	16.82
6015	49.88	7180	41.78	9710	30.90	11930	25.15	17840	16.82
6020	49.83	7190	41.72	9715	30.88	11940	25.15	17855	16.80
6025	49.79	7195	41.70	9720	30.86	15115	19.85	17865	16.80
6070	49.42	7205	41.64	9725	30.85	15135	19.82	17875	16.79
6080	49.34	7210	41.61	9750	30.77	15145	19.81	17885	16.78
6095	49.22	7225	41.52	11725	25.59	15170	19.78	21485	13.97
6105	49.14	7235	41.47	11735	25.56	15185	19.76	21600	13.89
6120	49.02	7245	41.41	11745	25.54	15195	19.74	21620	13.87
6125	48.98	7255	41.35	11755	25.52	15215	19.71	21665	13.84
6130	48.94	7285	41.18	11760	25.51	15255	19.66	21680	13.84
6140	48.86	7295	41.12	11775	25.48	15265	19.66	21720	13.81
						15295	19.61	21745	13.80

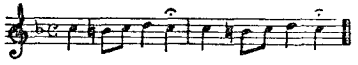
Most RFE freq's are registered for use both in Germany and in Portugal and the selection of tr. location is a function of propagation conditions throughout the year.

D.PRGR: directed to Bulgaria, Czechoslovakia, Hungary, Poland, and Rumania:

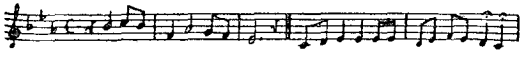
Bulgarian Prgr.	**Oct.-March m.b.**	**April-September m.b.**
04.00–06.00	49, 41, 31	49, 41, 31, 25
16.00–21.30	49, 41, 31, 25, 19, 16	49, 41, 31, 25, 19, 16
Czech-Slovak Prgr.		
03.57[1]–23.00	75, 49, 41, 31, 25, 19, 16	75, 49, 41, 31, 25, 19, 16
14.00–16.00, 22.20–23.00	417	417
Hungarian Prgr.		
03.55[2]–23.00	49, 41, 31, 25, 19, 16	41, 31, 25, 19, 16
Polish Prgr.		
03.55[3]–06.00	417, 75, 49, 41, 31	417, 49, 41, 31, 25
06.00–17.00	49, 41, 31, 25, 19, 16	49, 41, 31, 25, 19, 16
17.00–23.00	417, 75, 49, 41, 31, 25	417, 49, 41, 31, 25, 19
Rumanian Prgr.		
04.00–08.00	75, 49, 41, 31	49, 41, 31, 25
15.00–21.30	49, 41, 31, 25, 19, 16	49, 41, 31, 25

[1]=Sun 05.57 [2]=Sun 05.55 [3]=Sun 04.55.
N. every h on the h (for all Sce's).
Meter band assignments change throughout the year as propagation conditions vary.

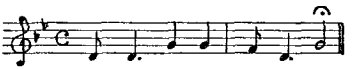
ANN: Sign on and sign off: **Bulgarian:** "Took E Radio Svobodna Evropa" ("This is Radio Free Europe").
Czechoslovak: "Hlási se vám ceskoslovenská stanice rozhlasu Svobodná Evropa" ("This is the Czechoslovak Station of Radio Free Europe calling").
Hungarian: "Itt a Szabad Európa Radió" ("This is Radio Free Europe").
Polish: "Mówi rozglosnia Polska Radia Wolna Europa" ("This is the Polish station of Radio Free Europe").
Rumanian: "Aici e Radio Europa Libera" ("Here is Radio Free Europe").
INT-SIG: Bulgarian: Part of Bulgarian National Anthem (Celeste):



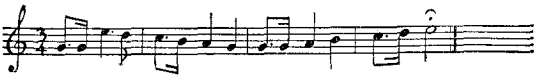
Czech/Slovak: Czech and Slovak National Anthem (Celeste):



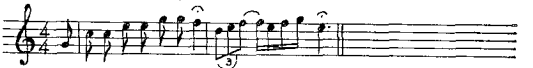
Hungarian: Old Hungarian folksong: "From the Tisza, past the Danube":



Polish: Polish patriotic song: "Hail Glorious Dawn of May". (Brass instruments):



Rumanian: Folk Motif (Orch & Flute):



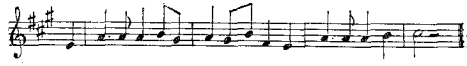
V. by QSL-card. Recordings accepted.
FI: By American contribution through the Radio Free Europe Fund.

RADIO LIBERTY (Private, non-comm.)

ADDR: Lilienthalstrasse 2, 8 Munich 19. **Cable:** RadLibComm. **Te:** 5130031 – **L.P:** Dir: W. K. Scott. Headquarters, New York: Pres. R. Liberty Committee, Inc: H. H. Sargeant.
STATIONS: Lampertheim (Germany): 50/20kW; Playa de Pals (Spain): 500/250/100kW; Pa-Li (Taiwan): 50kW.
G.C: Lampertheim: 08.33E/49.30N – Playa de Pals: 03.10E/42.00N – Pa-Li: 121.27E/25.05N.

kc	m	kc	m	kc	m	kc	m	kc	m
3990	75.19	7295	41.12	11725	25.59	15130	19.83	17720	16.93
5955	50.39	9520	31.51	11770	25.49	15225	19.70	17750	16.90
6095	49.22	9555	31.40	11870	25.27	15340	19.56	17755	16.90
6170	48.62	9660	31.06	11935	25.14	15370	19.52	17775	16.88
7155	41.92	9680	30.99	11970	25.06	15380	19.50	17875	16.79
7220	41.55	9750	30.77	15125	19.83	15445	19.43	17895	16.75
7285	41.18							17760	16.89

D.PRGR: 00.00–24.00.
Target areas: E. Germany 75, 49, 41, 31, 25 m.b. – Hungary 75, 49, 41 m.b. – No.+So. Russia, Belorussia, Ukraine 49, 41, 31, 25, 19, 16 m.b. – Tatar ASSR, Bashkir ASSR, Caucasus, Soviet Central Asia 49, 41, 31, 25, 19 m.b. – Soviet Far East 16, 19, 25 m.b. – **N:** Every h.
ANN: Azerbaijani: "Danyshyr Azadlyk Radiosu" – Armenian: "Chosume 'Azatutiun' Radiokayane" – Belorussian: "Gavaryts Radyio Svoboda" – Georgian: "Laparakobs Radiosadrugi Thavisuphleba" – No. Caucasian: "Govorit Radiostantsia Svoboda" – Russian: "Govorit Radiostantsia Svoboda" – Tatar-Bashkir: "Monda Azatlyk Radiostansyese Suyili" – Turkestani: "Azatlyk Radiosydan Gapiramiz" – Ukrainian: "Hovorit Radio Svoboda" – **INT-SIG:** Hymn to Freedom – by Gretchanioff. V. by QSL-card.



R. Liberty speaks to the people of the U.S.S.R. as a free voice of their fellow countrymen abroad. R. Liberty is supported by the R. Liberty Committee, Inc., which derives its funds from private persons and organizations in the U.S.A.

VOICE OF AMERICA RADIO STATION IN GERMANY

ADDR: Voice of America, Washington D.C. 20547 USA.
Medium Wave: Munich A 1196kc 251m 300kW: 03.00–07.30, 16.00–23.45. – **Short Wave:** Munich 100kW: 03.00–07.30, 12.00–23.30(Sun 23.45)

3980 kc	75.38 m	9545 kc	31.43 m	15195 kc	19.74 m
6040 kc	49.67 m	9760 kc	30.74 m	17860 kc	16.80 m

Medium Wave: 03.00–04.15 Russian, 04.15–04.30 Hungarian, 04.30–04.45 Czech, 04.45–05.00 Polish, 05.00–07.30 English, 16.00–18.00 English, 18.00–19.00 Czech, 19.00–20.00 Polish, 20.00–21.00 Hungarian, 21.00–21.30 English, 21.30–22.00 French(to No.Africa), 22.00–23.45 English.
Short Wave: See USA.
ANN: "You are listening to the Voice of America from Munich" – **INT-SIG:** Variations of "Columbia, the Gem of the Ocean" – V. by QSL-card.

GERMANY

GERMAN DEMOCRATIC REPUBLIC

L.T: GMT+1 h – **Pr.L:** German.

STAATLICHES RUNDFUNKKOMITTEE (Gov.)

ADDR: 116, Berlin, Nalepastrasse 18–50. **Te:** 632831. **Cable:** Funkkomitee – **L.P:** Dir. Gen: Prof. Dr. h. c. G. Eisler. Vice Dir. Gen: R. Grimmer. Dir. Adm: H. Ebel. Dir. Tec: W. Schmidt. Dir. Foreign Rel: M. Müller. Intendant: K. Ehrich (Deutschlandsender), H. Classen (Berliner Rundfunk), R. Schmidt. (R. DDR), C. Kirschnek (R. Berlin International).

Germany

HOME SERVICE

DEUTSCHLANDSENDER: D.Prgr: D 03.00–02.45.

Location	kc	m	kW
Berlin (Königswusterhausen)	185	1621.6	200/1000
Burg	782	383.6	250
Schwerin (Wöbbelin)	728	412.1	250
Suhl (Wachenbrunn)	692	433.8	250
Berlin	6115	49.06	20
Berlin	7185	41.75	5

FM:	ch	Mc	kW		ch	Mc	kW
Sonneberg	24	94.2	1	Karl Marx-Stadt	34	97.05	1
Schwerin	27	95.25	10	Inselsberg	34	97.15	10
Leipzig	32	96.6	10	Brocken	35	97.4	10
Marlow	32	96.65		Berlin-Köpenick	35	97.65	3
Dequede	33	96.9	1				

Sat/Sun 03.00–23.30; Mon–Fri 03.00–03.00, 11.00–23.20 on 185/692/728/782/6115/7185kc and all FM-st's; Mon–Fri 08.00–11.00 on 185/692/782kc (Tues–Fri) + all FM-st's exc. 97.65Mc; D 23.20–02.45 on 782/728kc + 97.65Mc.

N&Wrp: 00.00, 02.00, 03.05(W), 03.30(W), 04.00, 04.30(W), 05.00, 05.30(W), 06.00, 07.00, 09.00, 11.00, 12.00(W), 14.00, 16.00, 18.00, 20.30, 21.00

Comm: 17.10, 19.40 (repeat) – **Actualities:** 14.05, 16.00 – **Press Review:** 06.05 – **Folklore:** Sun 06.20 (twice monthly), Mon, Wed 09.30, Tues 20.00 *(twice monthly), Thurs 14.30, Fri 09.25* – ***Maritime Wrp*** *(on* 185kc only): 02.45, 04.05 (all freq's), 16.50, 23.20.

BERLINER RUNDFUNK: D.Prgr: 03.00–02.00.

Medium Waves:

Station:	kc	m	kW		kc	m	kW
Karl-Marx-Stadt	602	498	20	Reichenbach	917	327.2	20
Berlin-Köpenick	611	491	500	Plauen	1079	278.1	20
Potsdam	656	457.3	20				

FM Stations:	ch	Mc		ch	Mc
Karl-Marx-Stadt	10	89.8	Brocken	15	91.55
Dresden	10	90.1	Sonneberg	16	91.7
Inselsberg	11	90.2	Marlow	22	93.5
Leipzig	11	90.4	Schwerin	38	98.55
Berlin	15	91.4	Dequede	40	98.9

03.00–23.05 on all freq's; 23.10–02.45 on 611kc only. Mon 07.30–11.00 *on 656kc/91.4Mc;* Wed 07.30–11.00 *not on 656kc* – **N. Wrp:** W 00.30, 01.30, 03.05, 03.30, 04.30, 05.00, 05.30, 06.00, 06.30, 07.30, 09.30, 11.30, 15.30, 16.30, 18.30, 20.30, 22.30. Sunday: 00.30, 01.30, 04.30, 05.30, 06.30, 07.30, 09.30, 12.30, 14.00, 16.30, 18.30, 20.30, 20.30, 22.30 –

Comm: *11.30* (Sun) *18.00* (W) – **Actualities:** *17.00, 20.40* (W), *15.45* (Sun) **Press-Review:** 10.50 (W) – **Folklore:** Tues 12.00.

RADIO DDR I: 24 h of information & entertainment.

Stations:	kc	m	kW		kc	m	kW
Schwerin	529	567.1	220	Berlin	881	340.5	100
Greifswald	557	538.6	5	Dresden	1043	287.6	220
Leipzig	575	521.7	120	Suhl	1052	285.1	20
Erfurt	629	476.9	20	Seelow	1546	194	5
Cottbus	746	402.1	20	Bernburg	1570	191.1	20

FM:	ch	Mc		ch	Mc
Inselsberg	3	87.85	Schwerin	7	89.2
Marlow	4	88.25	Dequede	8	89.4
Leipzig	5	88.45	Berlin	29	95.8
Brocken	6	88.95	Helpterberg	30	95.95

D.PRGR: 03.00–23.10 on all freq's; 23.00–03.00 on 557, 1043kc and Mon, Wed, Fri also on 575kc.

N& Wrp: W 04.00–22.00 every h on the h, **D.** 00.30, 01.30, W 03.05, 03.30, 05.30, 06.30. Sun 03.05, 04.00, 05.00, 06.00, 08.00, 10.00, 12.00, 14.00, 16.00, 18.00, 20.00, 21.00. **Folklore:** Tues, Thurs, Sat 07.05, Sat also 17.05 – **Actualities and Comm** (also on R. DDR II): 09.10(W), 18.10(D), 21.10(W) – **Rlg Sce:** Sun 06.30 – **Prgr.** Preview: 14.05(W) – **Folklore:** Tues, Thurs, Sat 07.05, Sat also 17.05..

RADIO DDR II: D 09.00–23.10.

FM Stations:	ch	Mc	kW		ch	Mc	kW
Reinsberg	12	90.5	10	Leipzig	23	93.85	10
Marlow	14	91.05	10	Brocken	25	94.6	1
Dresden	17	92.25		Dequede	26	94.9	
Inselsberg	18	92.55	1	Berlin (Köpenick)	27	97.05	
Schwerin	19	92.75	10	Görlitz	28	95.4	
Karl-Marx-Stadt	19	92.85	10	Cottbus	39	98.6	

D.PRGR: ***N& Wrp:*** *09.00(W), 11.00, 12.00(Mon–Fri), 13.00(W),* 14.00(Sun), 15.00(Sat), 16.30(Sun), 17.00(W), 18.00(Sun), 21.00. **L.L:** 10.40–10.55: **E** (Wed), **F** (Tues), **Russ** (Thurs), **Sp.** (Fri), 16.00–16.15: **E** (Tues), **F** (Mon), **Russ** (Wed), **Sp** (Thurs) – **Actualities:** 17.10(W), 18.10(Sun), 21.20(W).

Rel. R. DDR I: Mon & Wed 22.10 (Sun & Thurs 23.00)–23.10; Tues, Fri, Sat 22.00–23.10.

BERLINER WELLE

Station: Berlin-Köpenick 1358kc 220.9m 50kW – ch42 99.7Mc 10kW.

D.PRGR: Sun 03.00–23.05, 23.05–02.45 on 99.7Mc only; Mon–Fri 03.00–11.00, 14.30–23.05; Mon, Wed–Sat 23.10–02.45 on 99.7Mc only; Tues 23.10–02.45 on 611kc only; Sun 23.05–02.45 on 99.7Mc only; Sat 03.00–23.05; Mon 07.05–11.00 only on 99.7Mc; Sun 03.00–06.00, 12.30–14.45 as Berliner Rundfunk, Mon–Sat 03.00–04.00 as Berliner Rundfunk.

N. Wrp: W 00.30, 01.30, 03.05, 03.30, 04.00, 04.30, 05.00, 05.30, 06.00, 06.30, 07.00, 08.00, 14.30 (Sat 14.00), 15.30 (not Sat), 16.00, 17.00, 18.00, 20.00, 21.00 (Sat), 22.00 Sun 00.30, 04.30, 05.30, 06.30, 07.30, 12.30, 16.00, 18.00, 20.00, 21.00, 22.00 – **Comm:** 18.10 (Sun), 18.12 (W) – **Actualities:** 16.05 (Sun), 17.00 (W) – **Folklore:** Sat 10.00.

Stereophonic exp. prgr's: 14.50–15.30 (Sun), 17.30–18.00 (Tues, Thurs).

RADIO BERLIN INTERNATIONAL

kc	m	kc	m	kc	m	kc	m
1430	210.0	7300	41.09	11765	25.50	15390	19.49
1511	198.5	9500	31.58	11785	25.46	17700	16.95
5955	*50.39*	*9570*	*31.35*	*11825*	*25.37*	*17725*	*16.93*
6050	49.59	9600	31.25	11830	25.36	17755	16.90
6080	49.34	9650	31.09	15210	19.72	17820	16.84
6115	49.06	9730	30.83	15240	19.69	17880	16.78
6160	*48.70*	*11705*	*25.63*	*15270*	*19.65*	*21555*	*13.92*
7185	41.75	11760	25.51	15325	19.58		

EUROPEAN SERVICE: On 6080/6115/7185/7300/9730kc:

English: 17.30–18.00, 20.15–20.45, 22.00–22.30 (exc. 7300kc), 23.00–23.30 (exc. 7300kc) – **French:** 18.30–19.00 (exc. 9730kc), 21.00–21.30, 23.45–00.15 (exc. 7300kc) – **Danish:** 18.00–18.30, 19.15–19.45 (exc. 9730kc) – **Italian:** 16.00–16.30, 21.30–22.00 (exc. 7300kc) – **Swedish:** 17.00–17.30, 19.45–20.15 (**DX-Prgr:** Sat. 17.00, 19.45) – **German:** 16.30–17.00, 19.00–19.15 (exc. 9730kc) 20.45–21.00 – **Spanish:** 22.30–23.00 (exc. 7300kc).

NEAR EAST SERVICE:

Arabic: 05.30–06.30 on 9730/11760/15210/15270kc, 11.00–14.00 on 9730/15270/17755kc, 19.30–20.00 on 9600/11765kc – **German:** 14.00–15.00 on 9730/15270/17755kc, 18.00–18.30 on 9600/11765kc – **Music:** 18.30–19.30 on 9600/11765kc.

To No. We. Africa: Arabic: 13.30–14.00 on 11705kc, 21.15–21.45 on 6050kc – **German:** 14.00–14.30 on 11705kc – **French:** 20.30 –21.15 on 6050kc.

AFRICA SERVICE

To Ce. Africa: Swahili: 03.00–03.45 *on* 11825kc, 10.45–11.30 *on* 17700kc, 16.45–17.30 on 15390kc – **English:** 03.45–04.30 on 11825kc, 12.15–13.00 on 17700kc, 16.00–16.45 on 15390kc – **French:** 04.30–05.15 on 11825kc, 11.30–12.15 on 17700kc, 17.30–18.15 on 15390kc.

To We. Africa: French: 05.30–06.15 on 9570kc, 14.00–14.45 on 21555kc, 18.30–19.15, 20.30–21.15 on 11830kc – **English:** 06.15–07.00 on 9570kc, 13.15–14.00 on 21555kc, 19.15–20.00 on 11830kc – **German:** 20.00–20.30 on 11830kc.

To Ea. Africa: Swahili: 10.45–11.30 on 17725kc, 16.45–17.30 on 15325kc – **French:** 15.15–16.00 on 15325kc – **German:** 14.45–15.15 on 15325kc.

SO. EA. ASIA SERVICE

English: 06.45–07.30 on 17700kc, 12.00–12.45 on 17820/17880kc, 13.15–14.00 on 17880kc, 14.15–15.00 on 15240kc – **German:** 11.30–12.00 on 17820/17880kc, 12.45–13.15 on 17880kc.

DX-Prgr (to So. Ea. Asia/Australia/New Zealand/Pacific): Sat about 12.30, 14.20, Sun 07.20.

NO. AMERICA SERVICE

To East Coast: English: 01.00–01.30, 02.30–03.00 on 5955/6160kc – **German:** 01.30–02.30, 03.00–03.30 on 6160/5955kc – **Music:** 03.30–*04.30 on 6160kc.*

To. West Coast: English: 03.45–04.15, 04.45–05.15 on 5955/9650kc – German: 04.15–04.45 on 5955/9650kc.

LATIN AMERICA SERVICE

Portuguese: 22.00–23.00 on *9500/9600/11785kc,* 01.00–02.00 on 9500/9600kc – **Spanish:** 23.00–24.00 on 9500/9600/11785kc, 02.00–03.00 on 9500/9600kc – **German:** 00.00–01.00 on 9500/9600/11785kc, 03.00–03.30 on 9500/9600kc.

ANN: E: "This is R. Berlin International the Voice of the German Democratic Republic". F: "Ici Berlin International, la République Démocratique Allemande vous parle". (Africa Sce: "Ici R. Berlin International la Voix de la République Démocratique Allemande"). Swedish: "Här är R. Berlin International, Tyska Demokratiske Republikens sänding på svenska". Danish: "De lytter til R. Berlin International. Den Tyske Demokratiske Republik sender til Danmark". I: "Qui R. Berlino Internationale, la voce della Repubblica Democratica Tedesca". P: "R. Berlin Internacional, a voz da República Democrática Alemana". Sp: "Habla R. Berlin Internacional, la Voz de la República Democrática Alemana".

Deutscher Demokratischer Rundfunk

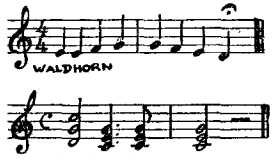
Deutsche Demokratische Republik

D.D.R., 116 Berlin
Nalepastrasse 18-50

Telefon: 632831

Telex: 011276-278

Foreign Service: Theme from Ludvig van Beethoven's 9th Symphony ("Freude, schöner Götterfunken"):



V. by QSL-card – **PUB:** "Funk und Fernsehen" (weekly) free on request.

BROADCASTS OF THE SOVIET COMMITTEE FOR CULTURAL RELATIONS with fellowcountry-men in the German Democratic Republic: **ADDR:** Vertretung des Sowjetischen Komitees *für kulturelle Beziehungen mit Landsleuten im Ausland, Behrenstr.* 64/65, Berlin W 8, Postal Addr: 108, Berlin 8. Te: 221480 – Further details see USSR.

RADIO VOLGA (Soviet Forces in Germany)
ADDR: Menzelstr. 5, Potsdam.
STATION: Königswusterhausen 263kc 1141m 100kW.
D.PRGR: 05.00(Sun 06.00)–22.30 (relay R. Moscow I) – **Special Prgr's for Soviet Forces in E. Germany:** Sun 09.20–13.00, W 17.00–19.00 – **ANN:** "Govorit Volga".

GIBRALTAR (British Colony)

L.T: GMT+1 h – **Pr.L:** English, Spanish.
RADIO GIBRALTAR (Gov, Comm.)
ADDR: *Wellington Front, Gibraltar.* **Cable:** *Broadcasts.* **Te:** *2519.*
L.P: Chmn. Gibraltar Broadc. Corpo: C. R. Piccone, Man. Agents: Gibraltar Broadc. Ltd. Chmn: Lord Thomson. Man. Dir: J. M. Coltart. Gen. Mgr: H. J. Ramagge. Chief Eng: T. G. Black.
STATION: Wellington Front 1484kc 202.2m 0.5/1kW.
HOME SCE: English, Spanish: *06.55–23.00.* **N:** English: *07.00, 11.00* (exc. Sat), 12.30*, 20.00, 20.15*. **Spanish:** 13.00*, 13.15, 21.30*, 21.35. **Wrp:** W 08.25, 13.30, Sun 08.30 – *=Local N, other times relay BBC. **ANN:** "This is Gibraltar" – V. by letter. Re. in English or Spanish. Recorded rep. accepted – **PUB:** Prgr.schedule free on request.
FI: By Gov. & adv – **AD:** *4 times daily* – **ALF:** *£ 0–10–0.*

BRITISH FORCES BROADC. SCE. GIBRALTAR is operated by the Ministry of Defence to provide a service of inf, entertainment as well as a link with home for H.M. Forces stationed in Gibraltar. It is non-comm, does not accept adv – **ADDR:** BFBS, c/o Hqs Royal Signals, Wellington Front, Gibraltar – **L.P:** St. Contr: Lt. Col. J. R. Edgar, MBE. Prgr. Org: Miss M. Hoare.
STATION: 93.5 Mc.
D.PRGR: W 05.45–08.00, 10.15–13.15, 15.00–22.09 (Sat 10.30–22.09). Sun 09.00–22.09. **N:** 06.00, 07.00, 12.00 (Sat 11.45), 13.00, 18.00, 20.00, 22.00 – **ANN:** "This is the British Forces Broadc. Sce. Gibraltar" – V. by QSL-card. Rp.

GREAT BRITAIN

L.T: GMT (Su: GMT+1 h) – **Pr. L:** English.
THE BRITISH BROADCASTING CORPORATION
The BBC is an independent body created by a Royal Charter and operated under a Licence and Agreement with the Postmaster-General.
ADDR: Broadc. House, London, W. 1. **Te:** Langham 4468. **Telex:** 22182. **Cable:** "Broadcasts".

O. I. R. T.

Review of the International Radio and Television Organization (O. I. R. T.):

RADIO & TELEVISION

published in English - French, Russian and German brings every 2 months valuable information on the world of Broadcasting and Television.

Subscription: The International Radio and Television Organization (O. I. R. T.), U Mrázovky 15, Praha 5, Czechoslovakia.

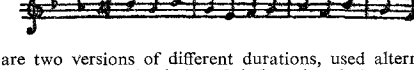
L.P: Board of Management: Dir. Gen: Sir Hugh Greene, K.C.M.G, O.B.E. Dir. of External Broadc: E. Tangye Lean, C.B.E. Chief Asst. to Dir. Gen: O.J. Whitley. Dir. of Adm: J. H. Arkell, C.B.E. Dir. of Engineering: F. C. McLean, C.B.E. Dir. of Sound Broadc: F. G. Gillard, C.B.E.
Deputies, Asst. Dir's and Controllers: Dep. Dir. of Engineering: M.J.L. Pulling, C.B.E. Asst. Dir. of Engineering: D. B. Weigall. Asst. Dir. of Sound Broadc: R.D.A. Marriott, C.B.E, D.F.C. Contr. Prgr. Organization (Sound): M. F. C. Standing, C.B.E. Editor, News and Current Affairs: D.I. Edwards, C.B.E. Contr. Music: W.F. Glock, C.B.E. Contr. Educ. Broadc: R.S. Postgate. Chief Engineer Sound Broadc: A.P. Monson. Contr. European Sces: J. Monahan, C.B.E. Contr. Overseas Sces: D.M. Hodson. Contr. Adm. External Broadc: R.W.P. Cockburn. Chief Engineer External Broadc: K.R. Sturley, Ph. D. Head of External Sce's News Dept: K. Fairfax. Secr: C.J. Curran. Legal Adviser: E.C. Robbins, C.B.E. Head of Overseas & Foreign Relations: D. Stephenson, C.B.E. Chief of Home Sce: G. E. Mansell. Chief of Light Prgr: D. E. Morris, O.B.E. Chief of Third Prgr: P. H. Newby. Chief Engineer External Relations: E.L.E. Pawley, O.B.E. Chief Engineer Adm: J.E.F. Voss. Chief Engineer, Communications: G. Stannard.
Regional Controllers: Wales: A. B. Oldfield-Davies, C.B.E. Midland: P. M. Beech. N. Ireland: B. W. Maguire. Scotland: A. Stewart, C.B.E. West: S. J. de Lotbinière, C.V.O, O.B.E. North: R. Stead, C.B.E.
HOME SCE: W 06.35–23.45 approx. Sun 07.50–23.45 approx.

		kc	m	kW
Cromer	Northern	692	434	2
Moorside Edge	–	692	434	150
Whitehaven	–	692	434	2
Barrow	–	1484	202	2
Westerglen	Scottish	809	371	100
Burghead	–	–	–	100
Redmoss	–	–	–	5
Dumfries	–	–	–	2
Washford	Welsh	881	341	100
Penmon	–	–	–	8
Towyn	–	–	–	5
Wrexham	–	–	–	2
Brookmans Park	London	908	330	140
Ramsgate	–	1484	202	2
Start Point	West	1052	285	120
Barnstaple	–	–	–	2
Clevedon	–	1457	206	20
Bartley	–	–	–	10
Brighton	–	–	–	2
Folkestone	–	–	–	1
Bexhill	–	–	–	2
Redruth	–	–	–	2
Droitwich	Midland	1088	276	150
Postwick	–	–	–	7.5
Lisnagarvey	N. Ireland	1340	224	100
Londonderry	–	–	–	0.25
Stagshaw	Northern	1151	261	100
Scarborough	–	–	–	2

N: 07.00(W), 08.00, 09.00, 13.00, 18.00, 22.00, 23.00.
Greenwich T.S: 07.00(W), 08.00(D), 09.00, 11.00(W), 13.00, 18.00, 23.00.
LIGHT PRGR: W 05.30–02.00, Sun 06.55–02.00.

	kc	m	kW		kc	m	kW
Droitwich	200	1500	400	Moorside Edge	1214	247	50
Brookmans Park	1214	247	50	Plymouth	–	–	0.5
Burghead	–	–	20	Redmoss	–	–	2
Lisnagarvey	–	–	10	Redruth	–	–	2
Londonderry	–	–	0.25	Newcastle	–	–	2
				Westerglen	–	–	50

N: Mon–Fri 05.30 and every h on the half h until 20.30, 19.00, 22.30, 23.30, 23.55, Sat 05.30 and every h and on the half h until 12.30, 15.30, 17.30,19.00, 19.30, 20.35, 22.30, 23.30, 23.55, Sun 07.00, 07.30, 08.30, 09.30, 10.30, 19.30, 22.30, 23.55.
Greenwich T.S: 06.45 (200kc only), 09.00(W), 10.00(W), 12.00(Sat only), 14.00, 15.00(Mon–Fri), 19.00(W), 19.30(Sun), 20.30(Mon–Fri).
Opening SIG-TUNE: Oranges and Lemons 06.25(W), 14.00, 15.00 (Mon–Fri).



There are two versions of different durations, used alternately exc. Sun. Also, Harp arpeggio choice of six harp interludes.

THIRD NETWORK:
647kc 464m: Daventry (150kW); Edinburgh, Glasgow, Newcastle, Redmoss (2kW) – 1546kc 194m: Belfast, Bournemouth, Dundee, Exeter, Stockton (0.25kW); Brighton, Fareham, Leeds, Liverpool, Preston, Plymouth, Redruth, Swansea (1kW).

Music Prgr: Mon–Fri 07.00–18.30, Sat 08.00–12.30, Sun 08.00–17.00.
Study Session: Mon–Fri 18.30–19.30. Sports Sce: Sat only 12.30–18.00.
Third Prgr: Mon–Fri 19.30–23.15, Sat 18.00–23.15, Sun 17.00–23.15.

FM:

Stations	Light	Mc Third Network	Home	Version of H. Sce	kW/W (ERP)
Ashkirk	89.1	91.3	93.5	Scottish	18kW*
Ballycastle	89.0	91.2	93.4	N. Ireland	40W*
Barnstaple	88.5	90.7	92.9	West	180W*
Bath	88.8	91.0	93.2	West	35W*
Blaen-plwyf	88.7	90.9	92.1	Welsh	60kW
Brecon	88.9	91.1	93.3	Welsh	10W*
Brighton	90.1	92.3	94.5	West	150W*
Bressay	88.3	90.5	92.7	Scottish	10kW*
Brougher Mountain	88.9	91.1	93.3	N. Ireland	2.5kW
Cambridge	88.9	91.1	93.3	Midland	20W*
Carmarthen	88.5	90.7	92.9	Welsh	10W*
Churchdown Hill	89.0	91.2	93.4	Midland	25W*
Divis	90.1	92.3	94.5	N. Ireland	60kW
Douglas	88.4	90.6	92.8	North	6kW*
Forfar	88.3	90.5	92.7	Scottish	10kW*
Fort William	89.3	91.5	93.7	Scottish	1.5kW
Grantown	89.8	92.0	94.2	Scottish	350W*
Haverfordwest	89.3	91.5	93.7	Welsh	10kW*
Hereford	89.7	91.9	94.1	Midland	25W*
Holme Moss	89.3	91.5	93.7	North	120kW
Kendal	88.7	90.9	93.1	North	25W*
Kilkeel	88.8	91.0	93.2	N. Ireland	25W*
Kingussie	89.1	91.3	93.5	Scottish	35W*
Kinlochleven	89.7	91.9	94.1	Scottish	2W
Kirk o'Shotts	89.9	92.1	94.3	Scottish	120kW
Larne	89.1	91.3	93.5	N. Ireland	15W*
Les Platons	91.1	94.75	97.1	West	1.5kW
Llanddona	89.6	91.8	94.0	Welsh	12kW*
Llandrindod Wells	89.1	91.3	93.5	Welsh	1.5kW
Llangollen	88.85	91.05	93.25	Welsh	10kW*
Llanidloes	88.1	90.3	92.5	Welsh	5W
Lochgilphead	88.3	90.5	92.7	Scottish	10W*
Londonderry	88.3	90.55	92.7	N. Ireland	13kW*
Machynlleth	89.4	91.6	93.8	Welsh	60W*
Meldrum	88.7	90.9	93.1	Scottish	60kW
Melvaig	89.1	91.3	93.5	Scottish	22kW*
Morecambe Bay	90.0	92.2	94.4	North	4kW*
Newry	88.6	90.8	93.0	N. Ireland	30W*
Northampton	88.9	91.1	93.3	Midland	60W*
North Hessary Tor	88.1	90.3	92.5	West	60kW
Oban	88.9	91.1	93.3	Scottish	1.5kW
Okehampton	88.7	90.9	93.1	West	15W*
Orkney	89.3	91.5	93.7	Scottish	20kW*
Oxford	89.5	91.7	93.9	Midland	22kW*
			95.85	West	
Penifiler	89.5	91.7	93.9	Scottish	6W*
Perth	89.3	91.5	93.7	Scottish	15W*
Peterborough	90.1	92.3	94.5	Midland	20kW*
Pitlochry	89.2	91.4	93.6	Scottish	200W*
Pontop Pike	88.5	90.7	92.9	North	60kW
Redruth	89.7	91.9	94.1	West	9kW*
Rosemarkie	89.6	91.8	94.0	Scottish	12kW*
Rowridge	88.5	90.7	92.9	West	60kW
Sandale	88.1	90.3	94.7	North	120kW
			92.5	Scottish	
Scarborough	89.9	92.1	94.3	North	25W*
Sheffield	89.9	92.1	94.3	North	60W
Skriaig	88.5	90.7	92.9	Scottish	10kW*
Sutton Coldfield	88.3	90.5	92.7	Midland	120kW
Swingate	90.0	92.4**	94.4	London	7kW*
Tacolneston	89.7	91.9	94.1	Midland	120kW
Thrumster	90.1	92.3	94.5	Scottish	10kW*
Toward	88.5	90.7	92.9	Scottish	250W*
Weardale	89.7	91.9	94.1	North	100W*
Wenvoe	89.95	96.8	94.3	Welsh	120kW
			92.125	West	
Wrotham	89.1	91.3**	93.5	London	120kW

*) Directional aerial – **) Carries stereophonic tr's at times.

EXTERNAL SERVICES

41 sw-tr's: 15/50/75/100/250kW.
GC: Woofferton 02.43W/52.19N, **Daventry** 01.08W/52.15N, **Rampisham** 02.38W/50.48N, **Skelton** 02.54W/54.44N

kc	m	kc	m	kc	m	kc	m
3952.5	75.90	6035	49.71	6125	48.98	6195	48.43
3975	75.47	6050	49.59	6140	48.86	7105	42.22
5965	50.28	6070	49.42	6150	48.78	7110	42.19
5975	50.21	6080	49.34	6165	48.66	7120	42.13
5990	50.08	6110	49.10	6170	48.62	7130	42.08
6010	49.92	6120	49.02	6180	48.54	7135	42.05

kc	m	kc	m	kc	m	kc	m
7140	42.02	9710	30.90	11955	25.09	17790	16.86
7150	41.96	9720	30.86	12040	24.92	17810	16.84
7155	41 92	9725	30.85	12095	24.80	17860	16.80
7185	41.75	9735	30.82	15070	19.91	17870	16.79
7200	41.67	9740	30.80	15105	19.86	17880	16.78
7210	41.61	9750	30.77	15110	19.85	17885	16.78
7220	41.55	9755	30.75	15140	19.82	17890	16.77
7230	41.49	9760	30.74	15180	19.76	18080	16.59
7240	41.44	9765	30.72	15190	19.75	18150	16.53
7260	41.32	9770	30.71	15200	19.74	21455	13.98
7280	41.21	9825	30.53	15210	19.72	21470	13.97
7320	40.98	9915	30.26	15230	19.70	21490	13.96
7325	40.96	11680	25.68	15235	19.69	21530	13.93
9410	31.88	11705	25.63	15245	19.68	21550	13.92
9510	31.55	11710	25.62	15260	19.66	21595	13.89
9525	31.50	11720	25.60	15285	19.63	21600	13.89
9530	31.48	11750	25.53	15300	19.61	21610	13.88
9555	31.40	11770	25.49	15310	19.60	21615	13.88
9580	31.32	11780	25.47	15350	19.54	21630	13.87
9600	31.25	11795	25.43	15360	19.53	21640	13.86
9610	31.22	11800	25.42	15375	19.51	21660	13.85
9615	31.20	11820	25.38	15390	19.49	21675	13.84
9625	31.17	11830	25.36	15410	19.47	21680	13.84
9635	31.14	11840	25.34	15420	19.46	21710	13.82
9640	31.12	11860	25.30	15435	19.44	21740	13.80
9645	31.10	11880	25.25	15445	19.42	25650	11.70
9650	31.09	11890	25.23	17695	16.95	25670	11.66
9660	31.06	11905	25.20	17705	16.94	25720	11.66
9670	31.02	11910	25.19	17715	16.93	25840	11.61
9675	31.01	11920	25.17	17730	16.92	25850	11.60
9690	30.96	11925	25.16	17740	16.91	25920	11.57
9700	30.93	11930	25.15	17745	16.91	26040	11.52
9705	30.91	11945	25.12	17755	16.90	26080	11.50

The above freq's are shared between the European and Overseas Services and in addition the following freq's on Long and Medium Waves are used in the European Services.
200 kc 1500 m 647 kc 464 m 1295 kc 232 m
FM: Berlin 90.2 Mc.

The column below show the wavebands/frequencies which the BBC expects to use during the months from November to April. Details of wavelengths can be obtained from the programme journals, and are always announced at the microphone.

EUROPEAN SERVICES

	Nov/March(m.b)
Albanian	
17.30–18.00 N, Prgr.	49, 41, 31
Bulgarian	
04.45–05.00 N, Prgr.	49, 41, 31
10.30–10.45 N, Prgr.	25, 19, 16
15.30–15.45 E. by R. (Tues, Thurs, Sat)	25, 19
16.45–17.30 N, Prgr.	49, 41, 31
21.15–21.45 N, Prgr.	49, 41, 31
Czech	
05.15–05.30	1500, 232, 75, 49, 41, 31
14.00–14.15 N, Prgr.	41, 31, 25
14.15–14.45 (Sun only)	41, 31, 25
15.45–16.00 E. by R. (Tues, Thurs, Sat)	41, 31, 25
19.00–19.45 N, Prgr.	49, 41, 31
20.45–21.00 N, Prgr.	49, 41, 31
22.15–22.30 N, Prgr.	75, 49, 41
Slovak	
11.15–11.30 N, Prgr.	41, 31, 25, 19
16.30–16.45 N, Prgr.	49, 41, 31
English	**kc**
04.00–04.30 N, Prgr.	200, 3975, 5975, 6050, 7120, 7260, 9765
05.45–06.00 N, Prgr.	647
06.00–06.30 N, Prgr.	647, 3952, 5990, 6050, 6150, 7210, 7260, 9765, 11945
07.00–07.15 N(WS)	1295, 3952, 5990, 6050, 6150, 7210, 7260, 9765, 11945
10.15–10.30 Rlg Sce(W)	9510, 11945
13.00–13.15 N(WS)	7155, 9510, 9760, 11780, 11945, 15180, 15235, 15390, 17695
17.15–18.00 N, Prgr. }	1295, 3952, 5975, 6110,
18.00–18.30 N, Prgr.(WS) }	7185, 7120, 9735, 9770, 11945
21.00–21.15 N, Prgr.	1295, 3952, 3975, 5975, 6180, 7260, 9825
22.30–22.45 N, Prgr.	1295, 3975, 5975, 6125, 6180, 7260
English by Radio	
05.30–05.45	647, 3952, 5990, 7260, 9765
06.45–07.00	1295, 3952, 5990, 6050, 6150, 7210, 7260, 9765, 11945

Great Britain

English by Radio		kc
12.30–13.00		7155, 9510, 9760, 11780, 11945, 15180, 15235, 15390, 17695
17.00–17.15		1295, 3952, 5975, 6110, 7185, 7120, 9735, 9770, 11945
18.30–18.45		7110, 9735, 11945
19.30–20.00		1295, 3975, 5975, 6125, 7110, 7185
22.45–23.00		1295, 3975, 5975, 6125, 6180, 7260
Finnish		
15.30–16.00	Music(Sun)	7185, 9410
15.45–16.00	E. by R. (Mon, Wed, Thurs, Sat)	7185, 9410
16.00–16.45	N, Prgr.	7185, 9410
18.15–18.30	N, Prgr.	5975, 7185
French		
05.30–05.45	N, Prgr.	1295
06.30–06.45	N, Prgr.	647, 1295, 3952, 6050, 7210
07.15–07.30	E- by R.	1295, 3952, 6050, 7210
11.30–12.15	N, Prgr.	1295, 7155, 9760, 11780
18.30–19.30	N, Prgr.	1295, 5975, 7185, 9770, 11750, 15105, 15435
21.30–22.00	N, Prgr.	1295, 3975, 5975
German (also on 90.2Mc for Berlin)		
04.30–05.15	N, Prgr.	200, 1295, 3952, 5975, 6050
05.45–06.15	N, Prgr.	1295, 3975, 5975, 6010, 7325
11.45–12.00	N, Prgr.	1295, 7105, 9510, 11945, 15390
12.00–12.15	(Sun only)	
16.30–16.45	N, Prgr.	1295, 3952, 6110, 7210
16.45–17.00	(E. by R.)	
19.00–21.00	N, Prgr.	1295, 3952, 6110
Greek		m.b.
05.00–05.15	N, Prgr.	49, 41, 31
11.45–12.00	Prgr.	19, 16
16.00–16.15	E. by R. (Sun, Mon, Wed, Fri)	25, 19
19.00–19.30	N, Prgr.	49, 41, 31
Hebrew		
10.00–10.15	E. by R. (Thurs, Fri)	19, 16
15.00–15.30	N, Prgr.	25, 19
15.30–15.45	Sun only	
Hungarian		
05.30–05.45	N, Prgr.	49, 41, 31
06.30–06.45	N, Prgr.	75, 49, 41, 31
10.00–10.30	Music (Sun)	25, 19
12.15–12.30	N, Prgr.	31, 25, 19
15.15–15.30	N.	41, 31
15.45–16.00	E, by R. (Mon, Wed, Fri)	41, 31, 25
19.45–20.45	N, Prgr.	49, 41, 31
22.00–22.15	N, Prgr.	75, 49
Italian		kc
10.00–10.15	E. by R. (Sun)	15300, 17695
15.30–15.45	E. by R. (W)	7260, 9510, 11945
22.00–22.30	N, Prgr.	1295, 3975, 5975
Polish		m.b.
04.15–04.30	N, Prgr.	464, 75, 49, 41
06.15–06.30	N, Prgr.	232, 75, 49, 41, 31
13.15–13.30		
13.30–14.00	(Sun)	41, 31, 25
13.30–13.45	E. by R. (Wed/Sat)	
18.00–19.00	N, Prgr.	75, 49, 41
21.15–22.00	N, Prgr.	75, 49, 41
Portuguese		kc
12.15–12.30	N, Prgr.	11780, 15235
22.00–22.30	N, Prgr.	6180, 7210
Rumanian		m.b.
05.00–05.15	N, Prgr.	49, 41, 31
14.00–14.15	N, Prgr.	25, 19
15.30–15.45	E. by R. (Mon, Wed, Fri)	25, 19
16.00–16.15	N, Prgr.	41, 31, 25, 19
19.30–20.30	N, Prgr.	49, 41, 31
21.45–22.00	N, Prgr.	49, 41, 31
Russian *=Music		
03.45–04.00	Prgr.	464, 75, 49, 41, 31
11.00–11.15	N, Prgr.	31, 25, 19, 16
14.45–15.30	N, Prgr.	41, 31, 25, 19
15.30–15.45	*(Mon, Wed, Thurs, Sat)	41, 31, 25, 19
15.30–16.00	*(Tues, Fri)	41, 31, 25, 19
16.45–17.00	E. by R.	49, 41, 31, 25
17.00–18.00	N, Prgr.	49, 41, 31, 25, 19
20.00–21.00	N, Prgr.	75, 49, 41, 31
Spanish		kc
07.30–07.45	E. by R. (Mon, Wed, Thurs, Fri)	6150, 7210, 9670
13.15–13.30	N, Prgr.	11780, 15235
21.15–22.00	N, Prgr.	6180, 7325

Turkish		m.b.
05.15–05.30	N, Talk	49, 41, 31
15.45–16.00	N, Prgr.	25, 19
16.00–16.15	E. by R. (Tues, Thurs, Sat)	25, 19
18.30–19.00	N, Prgr.	49, 41, 31
Serbo-Croat		
14.15–14.30	N, Prgr.	25, 19
14.30–14.45	E. by R. (Mon, Wed)	25, 19
14.30–14.45	N, Prgr. (Sun)	25, 19
15.30–16.00	Slovene (Sun)	41, 31, 25
16.15–16.30	N, Prgr.	49, 41, 31
18.00–18.30	Slovene	49, 41, 31
20.30–21.15	N, Prgr.	49, 41, 31

GREENWICH T.S: at the h are radiated on one or other of the European Prgr's on the long, medium or sw. normally scheduled at 04.00, 05.00, 06.00, 11.00, 14.00, 16.00, 19.00, 20.00, 21.00, 22.00. – **Big Ben:** 12.00, 19.00, 21.00.

INT-SIG: (for European Service): Morse Signal "V" (V for Victory) played on Timpani (i.e. ...-) –

BBC WORLD SERVICE

To Australia	kc (Nov–March)
20.00–22.45	9410, 11750
21.30–22.45	9580
06.00–08.00	7120, 7150, 9640
07.00–08.00	11955
09.00–11.30	15070, 17790
To New Zealand	
20.00–22.45	9410, 11860, 15260
20.00–21.15	11820
06.00–08.00	6110, 7120, 7150, 9640
06.00–06.30	9510
07.00–08.00	9510, 11955
09.00–11.30	15070, 17790
To Japan/No. China No. West Pacific: see BBC Far Eastern Relay.	
To So. Asia (India/Pakistan/ Ceylon)	
23.00–23.15	6150, 7130
00.00–00.30	7325, 9410
01.45–02.15	6150, 7120, 9410
09.00–13.15	15070, 17790, 21550, 25650
13.15–14.00	15070, 17790, 21550
14.00–14.15	12095, 15070, 17790, 21550
14.15–16.15	12095, 15070, 17790
16.15–18.15	12095, 15070
To So. Ea. Asia (Burma, Thailand, Vietnam, Laos, Cambodia)	
23.00–23.15	9410
00.00–00.30	9410
01.45–02.15	7120, 9410
09.00–13.15	15070, 17790, 21550, 25650
13.15–14.15	15070, 17790, 21550
14.15–16.15	15070, 17790
16.15–18.15	15070
To Malaysia, Singapore Indonesia	kc
23.00–23.15	6150, 7130
00.00–00.30	7325, 9410
01.45–02.15	6150, 7120, 9410
09.00–13.15	15070, 17790, 21550, 25650
13.15–14.00	15070, 17790, 21550
14.00–14.15	12095, 15070, 17790, 21550
14.15–16.15	12095, 15070, 17790
16.15–18.15	12095, 15070

To Middle East	kc
03.00–08.00	6195, 9410
03.00–04.15	3952.5
04.00–08.00	12095
06.00–08.00	15140, 17790
09.00–18.15	15070
09.00–17.45	17790
09.00–16.15	21470
09.00–13.15	25650
14.00–20.15	12095
17.45–21.15	9410
18.00–21.15	7120
18.30–21.15	6195
To East Africa	
03.00–08.00	6195, 9410
04.00–08.00	12095
06.00–08.00	15140, 17790
09.00–20.15	15070
09.00–17.45	17790
09.00–16.15	21470
09.00–13.15	25650
14.00–20.15	12095
17.45–21.15	9410
18.00–21.15	7120
18.30–21.15	6195
To Italy, Greece, Malta Ce. Medit, No. Africa	kc
04.00–08.00	6195, 7185, 9410 9580, 11750, 12095
06.00–06.30	15140, 15235
06.30–07.00	15140
07.00–08.00	15140, 15235, 17790
09.00–18.30	15070
09.00–16.15	17705, 21470
09.00–17.45	17790
14.00–20.15	12095
16.45–22.45	9410
18.00–22.45	7120, 11860
18.30–22.45	6195
To Ce. & So. Africa	
04.00–08.00	7185, 9580, 11750
09.00–21.15	15070
09.00–17.45	21710
09.00–16.15	17705
09.00–13.15	25650
17.45–22.45	9410
18.00–22.45	7120, 11860
To We. Medit/We. Africa Gibraltar, No. We. Africa	kc
05.00–08.00	6110, 7185, 9580, 11750
05.00–05.15	9510
05.00–06.15	9410
05.00–06.00	11820

To We Medit. kc

06.00–06.30 / 07.00–08.00	9510, 11820, 15235
09.00–21.15	15070
09.00–17.45	21710
09.00–16.15	17705
16.00–18.00	15435
17.45–22.45	9410
18.00–22.45	7120, 11860
18.00–18.30	9770, 11750, 15105
19.45–21.15	15435
20.00–22.45	6195
20.00–21.15	11820

To So. America (So. of Amazon) kc

20.00–23.15	15260
21.15–03.30	9510
22.00–03.30	11750

To We. Indies, Ce. America So. America (No. of Amazon) kc

09.00–09.45	11760
09.45–13.15	17705
20.00–21.15	11750
21.30–03.00	6110, 9580, 11750
03.00–03.30	6110, 9580

To Canada, USA, Mexico kc

21.15–22.45	6195, 9510, 11780
22.45–03.30	6195, 9510

To So. Atlantic kc

22.00–00.30	7130, 9765

To Atlantic, Pacific Isl. kc

22.00–03.30	7130
23.00–03.00	3952.5

N: 00,00, 02.00, 03.00, 04.00, 05.00, 06.00, 07.00, 09.15, 11.00, 13.00, 14.00, 16.00, 18.00, 20.00, 22.00, 23.00 – **N. about Britain:** 00.09, 03.09, 07.20, 13.09, 18.09 – **R. Newsreel:** 00.15, 06.15, 07.45, 12.00 (W), 15.00 (exc. Sat) 18.15 – **From the Editorials:** 01.50 (exc. Sun), 03.30, 05.09, 07.15, 09.30 – **Greenwich T.S.:** 00.00, 01.00, 02.00, 03.00, 04.00, 05.00, 06.00, 07.00, 11.00, 12.00, 13.00, 14.00, 16.00, 17.00, 18.00, 20.00, 22.00, 23.00 – ANN: "BBC World Service" –

INT-SIG: Bow Bells.

The BBC World Service is also rebroadcast by the BBC Far Eastern, East Mediterranean-, Middle East-, West African and Atlantic relays (see the respective stations).

OTHER OVERSEAS SCE'S

ENGLISH

Pacific Sce (Australasia): 08.00–08.45 on 7120/7150/9640/11955kc.

Africa Sce: 04.45–05.00 (to Ea. & Ce. Africa) on 9660/9710/11925kc, 06.30–07.00 (to We. Africa) on 9510/11820/15235kc, 10.15–11.00 (to Ea. & Ce. Africa) on 17715/21630/25670kc, 11.00–12.00 (to We.Africa) on 15235/17810/21610kc, 16.15–16.30 (to Ea. & Ce. Africa) on 12040/21470kc, 17.00–17.45 (to Ea. & Ce. Africa) on 9915/12040/17715kc.

Mauritius Sce (in English/French): Mon 09.45–10.00 (fortnightly) on 17715/21630kc.

North American Sce (Canada/USA/Mexico): 15.00–16.30 on 15260kc, 16.30–17.30 on 15260/21610kc (in English/French).

Caribbean Sce (Ce. America): Mon–Fri 21.15–21.30 on 6110/9580/11750kc.

Falkland Isl. Sce: Sun 22.15–22.45 on 9765/11820kc.

FRENCH (to No, We. & Equatorial Africa):
05.15–05.45 on 6150/7210/7295/9510kc, 06.30–07.00 on 9670/11925/15390kc, 11.30–12.00 on 15105kc, 12.00–13.30 on 15105/17810/21610kc, 18.30–19.30 on 9770/11750/15105/15435kc.

PORTUGUESE & SPANISH (Latin American Sce):
Portuguese: 23.00–00.15 on 7210/9600/9825/12040kc – **N:** 23.00, 00.00, **Spanish:** 00.15–01.15 on 7210/9600/9825/12040kc, 01.15–02.15 on 6090/6180/7210/9600/9765/9825/11820/12040kc, 02.15–03.15 on 6090/6180/7210/9765/9825/11820kc – **N:** 00.15, 01.15, 02.00, 03.00.

IN OTHER LANGUAGES:

ASIA SCE

	m.b.
Bengali	
01.30–01.45	49, 41, 31
09.30–10.00	16, 13, 11
Burmese	
23.30–23.45	49, 41, 31
13.45–14.15	25, 19, 16
Chinese	
22.15–22.45	49, 41, 31
10.00–10.30	16, 13, 11
12.00–13.00	16, 13, 11
Hindi	
15.00–15.45	31, 25, 19, 13b
Indonesian	
23.15–23.30	49, 41, 31
10.30–11.00	16, 13, 11
Japanese	
22.00–22.15	49, 41, 31
11.00–11.30	16, 13, 11
Malay	
13.00–13.15	16, 13, 11
Persian	
16.15–17.00	31, 25, 19
Sinhala	
09.30–10.00c	16, 13, 11
Tamil	
09.30–10.00d	16, 13, 11
Thai	
23.45–24.00	49, 41, 31
13.15–13.45	16, 13, 11
Urdu	
14.15–15.00	31, 25, 19, 13b
Vietnamese	
22.45–23.00	49, 41, 31
11.30–12.00	16, 13, 11

ARABIC SCE:

Arabic	m.b.
03.45–04.45	49, 41, 31
04.45–05.45	49, 41, 31, 25
11.00–14.00	16, 13, 11, 19
14.00–14.15	31, 16, 13, 11, 19
14.15–15.45	31, 16, 13, 19
15.45–16.30	31, 16, 19
16.30–17.45	31
17.45–18.00	31, 25
18.00–19.15	41, 31, 25
19.15–21.00	41, 31

AFRICA SCE:

Hausa	m.b.
05.45–06.00	49, 41, 31
13.45–14.15	19, 16, 13
19.30–19.45	41, 31, 25, 19
Maltese	**m.b.**
16.30–16.45	25, 16
Somali	
14.30–15.00	16, 13
16.45–17.00	25, 19, 16
Swahili	**m.b.**
03.30–03.45	49, 41, 31
10.00–10.15	16, 13, 11
15.45–16.15	31, 25, 13
Urdu	
14.15–14.30	13

a) Mon/Wed/Sat; b) for Ea. Africa; c) Tues, Fri; d) Sun, Thurs.

V: The BBC welcomes reception reports, which are acknowledged with a special card. Re. to C.E.X.B, Bush House, London W.C.2. Recordings accepted – **PUB:** "Radio Times" "The Listener" (Weekly). "English by Radio and Television" (Fortnightly). "London Calling" (European Edition, Four Weekly). "London Calling" (Monthly). "BBC Handbook" (Annually) – **FI:** The revenue for its Domestic Sce's is drawn from the licence fees paid by listeners and viewers; the revenue for its External Services is provided by a Grant-in-Aid from the Treasury – **ALF:** £ 1-0-0.

Central Mediterranean Relay: see Malta.
East Mediterranean Relay: see Cyprus.
West African Relay: see Liberia.
Middle East Relay: see Aden.
BBC Far Eastern Station: see Malaysia.
Atlantic Relay: see Ascension Island.

BRITISH FORCES BROADCASTING SCE. (Head Office)

Responsible for the operation and control of the service on behalf of the Ministry of Defence. Also produces some 35 hrs. of recorded prgrs a week for tr by BFBS st's in Germany, Cyprus, Tobruk, Benghazi, Malta, Aden, Gibraltar and Singapore (see resp. countries). **ADDR:** Kings Bldgs, Dean Stanley St, London S.W.1. **Te:** TATe Gallery 5646 – **L.P:** Dir: B. W. Cave-Browne-Cave, OBE. Contr. Prgr's: I. J. Woolf. Contr. Prgr. Adm: A. E. Watson. Chief Eng: P. I. K. Woodford.

MANX RADIO (Comm)

Licensed by the GPO on behalf of the Isle of Man Gov – **ADDR:** P.O. Box 22, Douglas Isle of Man. **Te:** 3277 – **L.P:** Chmn: R. L. Meyer. Gen. Mgr: J. R. Grierson, M.A, LL.B. Chief Eng: R. Joyce.

STATIONS: 1295kc 232m 1/0.2kW (daylight) – 1594kc 188m 1/0.2kW (dawn-and-dusk)* – 89Mc (all times) – **D.Prgr's:** 06.55–19.00. After 19.00 Rlg. prgr's on 89Mc only; closedown varies from 19.15 to 22.00. * also used from 10.00 for rlg. prgr's – **ANN:** "This is Manx Radio on ... mw also broadc. in the VHF band on 89Mc from Douglas Isle of Man".

VOICE OF AMERICA RELAY STATION IN GREAT BRITAIN

ADDR: Voice of America, Washington, D.C. 20547, USA.

STATIONS: Woofferton 250kW: 02.00–07.30, 11.00–22.15.

kc	m	kc	m	kc	m	kc	m	kc	m
5965	50.29	7105	42.22	7295	41.12	11790	25.45	17855	16.80
6060	49.50	7170	41.84	9715	30.88	15160	19.79	21530	13.93
6080	49.34	7200	41.67	9740	30.80	15190	19.75		
6150	48.78	7270	41.27	11710	25.62	17800	16.85		

G.C: 02.43W/52.19N

D.PRGR: See USA – **ANN:** "This is the Voice of America" is announced in the language of the program in which it is given. Station identification is in English – "A broadcast of the Voice of America on facilities placed at their disposal by the British Broadcasting Corporation" – **V.** by QSL-card.

GREECE

L.T: GMT+2 h – **Pr.L:** Greek.

NATIONAL HELLENIC BROADCASTING INSTITUTE

(Ethnikon Idhryma Radiophonias, Gov. Statutory of Public Law). **ADDR:** Mourouzi Str. 16, Athens 138. **Studios:** Zappeion Bldg, Athens 118. **Te:** 714151. **Cable:** Radiostathens.

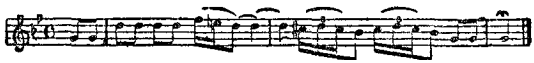
L.P: Pres. of the Adm. Council: G. Th. Spyropoulos. Dir. Gen: G. Dafnis. Dir. Tec: V. Aslanides. Dir. Pub. Rel: A. Margaritis.

STATIONS:	kc	m	kW
Athens (Nat.)	728	412.1	150
Athens (2' Prgr.)	1385	216.8	50
Athens (3' Prgr.)	665	451.2	15
Thessaloniki I	791	379.2	50
–	6095	49.22	35
–	9710	30.90	35
Thessaloniki II	1043	287.6	5
Corfu*	1007	298.0	50
Comotini	1403	213.8	5
Volos*	1484	202.2	1
Rhodos*	1493	201.0	5
Patras*	1511	198.5	0.2
Chania*	1511	198.5	5
Amalias*	1562	192.1	1.25

* Nat. & Reg.

HOME SCE: Nat. Prgr: W 04.30–08.00, 10.30–13.25, 15.00–23.05, Sun 04.30–23.05 – **N:** 05.15, 05.45* (Sun 05.25*), 06.15, 07.45, 11.00, 12.30(Sun 12.15), 15.00, 16.00, 17.00, 17.30*, 18.30, 19.30, 21.00, 22.00 – *=English & French – **Wrp:** 04.55, 05.55(English), 13.20(W), 17.55 – **Nat. Music:** Mostly at 05.30–06.45, 10.30–10.45, 17.00–17.30 – **Rlg. (Orthodox):** Sun approx. 05.35–08.00.

Thessaloniki I: 791kc: 04.55–22.30; 6095kc: 18.00–18.30; 9710kc: 11.00–13.00. **N:** 05.10, 05.15, 11.00, 12.30(W), 15.00, 15.30(W), 16.00, 22.00. **Calling Greeks in Europe:** D 20.00–20.30, Sat 21.30–22.00.
Nat. & Reg: Approx. times of tr. as **Nat. Prgr.**
2' Prgr: W 05.00–07.00, 08.00–13.15, 17.00–21.30. Sun 05.00–21.30. (Light prgr's, mainly) – **3' Prgr:** D 17.00–22.00 (serious music only).
ANN. (for all mw stations): "Ethnikon Idhryma Radiophonias" (NBI). **Nat. Prgr:** "Ethnikon Proghramma". **2' Prgr:** "Dhéfteron Proghramma". **3' Prgr:** "Triton Proghramma". **Reg. Prgr's:** Name of Region served as follows: "Radiophonikos Stathmos Macedonias" (for Thessaloniki). "R. S. Voriodhytikis Elladhos" (for Corfu). "R. S. Thrakis" (for Comotini). "R. S. Dhodhekanissou" (for Rhodos). "R. S. Kritis" (for Chania). Stations Volos, Patras, Amalias are announced "R. S. Volou, Patron, Amaliadhos" individually.
STATION-SIG: Used by all mw-st's of NBI: "Tsopanakos imouna" (Once I was a shepherd boy), a folk song played on native flute and sheep bells



INT-SIG: "Musical Box" played on vibraphone.
V. by QSL-card or letter. **Rp.** preferred. Recordings accepted – **PUB:** "Radioproghramma" (weekly in Greek) – **F.PL:** Two 100kW sw-tr's+FM netw. – **FI:** By licence payments and adv.

FOREIGN SERVICE: Athens – 7.5/5kW (G.C: 23.42E/38.02N):

5960 kc	50.34 m	9605 kc	31.20 m	17745 kc	16.90 m
6075 –	49.38 –	11720 –	25.60 –	17780 –	16.87 –
6175 –	48.58 –	11925 –	25.15 –	21485 –	13.96 –
7140 –	42.01 –	15345 –	19.55 –	25645 –	11.69 –
7295 –	41.12 –	15425 –	19.44 –	25965 –	11.55 –

Schedule:
I=Cyprus; II=Egypt; III=Turkey/Balkans; IV=No. Western Europe; V=Mediterranean.

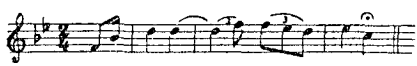
Times	Area	kc	Prgr.
07.00–08.15(W)	I	7295, 9605	N: 07.00
05.50–08.15(Sun)	I	7295, 9605	Rlg (orthodox)
09.00–10.00	II	9605, 11720	N: 09.00(exc.Mon)
10.30–13.00	I	7295, 9605	N: 11.00, 12.30(Sun 12.15)
13.30–15.15	III	7295, 9605	
16.30–17.00	I	7295, 9605	
17.30–18.00	IV	11720, 15345	N: 17.30
18.30–19.00	I	7295, 9605	
19.30–21.00	IV	11720, 15345	N: 19.30
22.00–22.30	V	11720, 15345	N: 22.00+shipping
23.00–23.30	V	11720, 15345	N: 23.00+shipping

[1]=exc. Mon – The above freq's are subject to changes.
Prgr's consist mainly of various Nat. Music & N.
ANN: Gr: "Ethnikon Idhryma Radiophonias. Edho Radiophonikos Stathmos Athinon Vrachcon Kymaton" – **INT-SIG:** see Home Sce – **V.** by QSL-card. Recorded re. preferred.

FORCES BROADCASTING STATIONS (Greek)

ATHENS (Central)

ADDR: Radhiostathmos Enoplon Dhynameon, 136-Messoghion St, Athens. **Te:** 662929 – **L.P:** Dir. Gen: N. H. Zogas. Dir. Tec: E. S. Tsamoussis. St. Mgr: T. I. Milis.
STATIONS: 1142 kc 262.7 m 20 kW – 6045 kc 49.63 m 5 kW.
HOME SCE: D 05.00–22.00 (Su: W 04.30–13.00, 15.00–23.00; Sun: 04.30–23.00) – **N:** 06.00, 12.00, 19.00, 21.00.
ANN: "Edhó Athinai, Kendrikós Radhiophonikós Stathmós Enóplon Dhynámeon Helládhos" (This is Athens, the Central R. St. of the Greek Armed Forces) – **STATION-SIG:** The main motif from the march "Greece never dies" played on trumpets



V. by letter. Recordings accepted.

Stations:	kc	m	kW		kc	m	kW
Florina	1313	228.4	1	Larissa	5955	50.38	0.4
Joannina	7155	41.92	0.25	Serrae	7161	41.90	1
Kavalla	1355	221.3	1	Thessaloniki	1169	256.6	10
Kozani	7215	41.58	0.5	*Tripolis*	6003	49.97	0.25
Larissa	944	318.0	5				

G.C: Tripolis: 22.23E/37.35N, Larissa: 22.25E/39.32N, Joannina: 20.49E/39.40N, Serrai: 23.35E/41.08N, Kozani: 21.48E/40.20N.
D.PRGR: W 05.00–07.00, 10.00–13.00, 15.00–21.00. Sun 05.00–13.00, 15.00–21.00 (Times are approx) – **FI:** By adv. only.

PRIVATE STATIONS: Numerous Greek private st's are in operation *mainly on mw, but most of them are "Pirates" having no normal prgr-*schedule and no good modulation.

VOICE OF AMERICA RADIO STATION AT RHODES

ADDR: Voice of America, Washington D.C. 20547 USA.
STATIONS: Medium Waves: Rhodes A 1259kc 238m 150kW: 03.00–07.30, 16.00–23.30(Sun 23.45).
Short Wave: Rhodes 50kW (G.C: 28.10E/36.15N) 6015kc 49.88m – 7295kc 41.12m: 04.00–06.00, 16.00–21.30
D.PRGR: 03.00–04.00 **English,** 04.00–06.00 Arabic, 06.00–07.30 **English,** 16.00–16.30 **English,** 16.30–17.00 Turkish, 17.00–17.30 Greek, 17.30–21.30 Arabic, 21.30–23.30(23.45 Sun) **English.**
ANN: "You are listening to the Voice of America from Rhodes" – **INT-SIG:** Variations of "Columbia, the Gem of the Ocean" – **V.** by QSL-card.

VOICE OF AMERICA RADIO STATION AT THESSALONIKI

ADDR: Voice of America, Washington, D.C. 20547 USA.
STATIONS: Medium Wave: Thessaloniki-A 791kc 379.2m 50kW: 04.30–06.30(Sun 10.15), 10.15–22.30 – **Short-Wave:** Thessaloniki 35kW: (GC: 22.57E/40.31N) 11.00–23.30(Sun 22.45).

5995 kc	50.39 m	7205 kc	41.64 m	9710 kc	30.90 m
6015 kc	49.88 m	7295 kc	41.12 m		

Medium Wave: 04.30–17.00 Greek(NBI), 17.00–17.30 Greek, 17.30–18.30 Rumanian, 18.30–19.30 Serbo-Croat, 19.30–20.00 Albanian, 20.00–20.30 Greek(NBI), 20.30–21.30 Bulgarian, 21.30–22.30 Greek (NBI) – **Short Wave:** See USA.
ANN: "You are listening to the Voice of America from Thessaloniki" – **INT-SIG:** Variations of "Columbia, the Gem of the Ocean" – **V.** by QSL-card.

ARMED FORCES RADIO & TV SCE:

Iraklion 1570kc 0.25 kw – Athens 1594kc 1kw.

HOLLAND

L.T: GMT+1 h – **Pr.L:** Dutch.

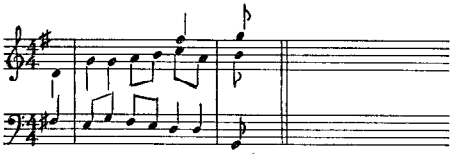
NEDERLANDSCHE RADIO UNIE

ADDR: P.O. Box 150, Hilversum. **Cable:** Radiounie. **Te:** 48506. **Telex:** 14470 – **HOME SCE:** Acting for the following broadcasting societies:
A.V.R.O: Algemeene Vereniging Radio-Omroep, Head Office Amsterdam, Keizergracht 107. Studios: Hilversum, 's-Gravelandseweg 52. **L.P:** Chmn: Dr. L. H. Slotemaker. Dir. Sound: J. M. van Overvest. Dir. TV: S. van der Zee. Adm. Dir: J. C. Bongenaar.
K.R.O: Katholieke Radio-Omroep: Head-Office: Amsterdam, Keizersgracht 151. Studios: Hilversum, Emmastraat 52 – **L.P:** Chmn: Dr. H. W. van Doorn. Secr: Dr. L. J. N. van der Hulst. Treasurer: Th. Loerakker. Man. Dir: Drs. A. J. J. v. d. Made. Sub. Dir. Radio: J. A. Wagenaar. Sub. Dir. TV: J. J. A. Casteleyns.
N.C.R.V: Nederlandsche Christelijke Radio Vereeniging, Schuttersweg 8, Hilversum – **L.P:** Chmn: Dr. J. Ozinga. Secr: G. A. Kieft. Man. Dir. Radio & TV: Dr. A. H. v. d. Veen.
T.R.O.S: Televisie Radio-Omroep Stichting, Herengracht 543, Amsterdam – **L.P:** Secr: Dr. H. J. Minderop. Head Radio & TV: Dr. J. M. Landrè.
V.A.R.A: Omroepvereeniging VARA, Heuvellaan 33, Hilversum – **L.P:** *Chmn: J. B. Broeksz. Secr-Treasurer: J. Mulder. Prgr. Dir.* Radio: J. de Troye. Dir. TV: J. W. Rengelink.
V.P.R.O: Vrijzinning Protestantse Radio-Omroep, 's-Gravelandseweg 65, Hilversum – **L.P:** Chmn: Ir. K. Kooy. Secr. a. i. Dr. I. J. van Houte. Dir. Radio: Dr. I. J. van Houte. Head Radio: D. Klompsma. Head TV: A. Kleywegt. Centraal addr. for Prgr. Publications: Centraal Bureau voor den Omroep in Nederland, Hilversum, P.O. Box 52 (for Radio & TV).
BOARD OF THE NEDERLANDSCHE RADIO-UNIE:
Chmn: Dr. A. B. Roosjen. Vice-Chmn: J. B. Broeksz. Secr: Drs. Ch. E. v. d. Ploeg. Prgr. Affairs: Dr. W. J. A. Wagenaar. Techn. Affairs: Dr. A. H. v. d. Veen. Personnel Affairs: K. de Wilde.
STATIONS: The studios are in Hilversum, but the tr's are located at Lopik (near Utrecht): Lopik I 746kc 402.1m 120kW – Lopik II 1007kc 297.9m 120kW – Lopik III 1250kc 240m 10kW.
Relay stations (I=relay Lopik I, II=relay Lopik II): Hengelo II 1594kc 188.2m 2.5kW – Hulsberg II 1594kc 188.2m 2.5kW – Hoogezand II 1594kc 188.2m 2.5kW.
FM: (I=relay Lopik I, II=relay Lopik II, III=relay Lopik III)

	ch	Mc	kW		ch	Mc	kW
Goes I	3	87.85	12	Markelo III	38	98.40	50
Goes II	27	95.0	12	Roermond I	4	88.2	100
Goes III	43	99.80	12	Roermond II	13	90.0	100
Hulsberg I	17	92.1	4	Roermond III	25	94.50	100
Hulsberg II	28	95.3	4	Smilde I	16	91.75	50
Hulsberg III	39	98.75	4	Smilde II	26	94.80	50
Lopik I	19	92.6	50	Hoogezand III	35	97.45	
Lopik II	33	96.8	50	Irnsum III	5	88.6	
Lopik III	40	98.90	50	Wieringen I	2	87.7	
Markelo I	15	91.4	50	Wieringen II	9	89.8	
Markelo II	31	96.2	50	Wieringen III	17	92.2	

D.PRGR: *Hilversum I and II:* W 06.00–23.00. Sun 07.00–23.00. Hilversum III: D 08.00–17.00.

N: Hilversum I: 06.00, 07.00, 12.00, 15.00, 17.00, 19.00, 21.30, 22.55. Hilversum II: 06.00, 07.00, 11.30, 18.00, 21.30, 22.55. Hilversum III: 08.00, 09.00, 10.00, 11.00, 12.00, 13.00, 14.00, 15.00, 16.00 – **Agricultural Inf.** (I+II): 11.27 – **Rlg. Prgr's:** (Sun) 08.00 & 15.00 (I), 16.30(II).
ANN: "Hier is de AVRO". "Hier is de KRO" etc – **V.** by QSL folder.
INT-SIG: Three first bars from the National Anthem "Wilhelmus van Nassau"



Regional Broadcasts

REGIONALE OMROEP NOORD EN OOST (RONO)
Addr: RONO, Prinsenhof, Martinikerhof 23, Groningen.
Stations:
Hoogezand 1594kc 188.2m 2.5kW Smilde ch23 94.8Mc 50kW
Hengelo 1594kc 188.2m 2.5kW Markelo ch30 96.2Mc 50kW
D.Prgr: Mon, Wed, Thurs, Fri 17.30–18.30, Tues, Sat 17.30–19.00, Sun 17.30–18.45.

REGIONALE OMROEP ZUID (ROZ)
Addr: ROZ, Van Hasseltkade 20, Maastricht.
Stations:
Hulsberg 1594kc 188.2m 2.5kW – Roermond ch13 90.0Mc 100kW Hulsberg ch28 95.3Mc 4kW.
D.Prgr: 18.00–19.00.
ALF: Dfl. 18,–.

RADIO NEDERLAND WERELDOMROEP (non-com.)
ADDR: R. Nederland, P.O. Box, 222, Hilversum. Office: Witte Kruislaan 55, Hilversum. **Te:** 16151. **Cable:** Mundivox – **L.P:** Dir. Gen: L.F. Tijmstra. Dep. Dir. Gen: C. J. Strop. Dirs: Prgr. Sce: J. W. Acda. N. Sce: J. Folkertsma. Centr. Prod. Sce: H.J.P.J. van Eijndhoven. Transcription Sce: P. J. Houtzagers. Dir. Tec: V. J. de Grijs. Producer "Happy Station" Prgr: Edw. Startz.
STATION: Lopik WO1 50 kW; WO2/3/4 100 kW; WO5 10 kW (G.C: 05.02E/52.01N).

kc	m	kc	m	kc	m	kc	m	kc	m
5980	50.17	9525	31.50	11780	25.47	15180	19.76	17830	16.83
5985	50.13	9590	31.28	11800	25.42	15220	19.71	17840	16.82
6005	49.96	9630	31.15	11820	25.38	15320	19.58	21480	13.97
6020	49.83	9715	30.88	11930	25.15	15425	19.45	21565	13.91
6025	49.79	9730	30.83	11935	25.14	15445	19.42	21570	13.91
6035	49.71	9745	30.79	11950	25.10	17765	16.89	21625	13.87
6085	49.30	9755	30.75	11955	25.09	17775	16.88	21665	13.85
7110	42.19	11710	25.62	11960	25.08	17800	16.85	21715	13.82
7165	41.87	11730	25.58	11970	25.06	17810	16.84	25610	11.71
7210	41.61	11755	25.52	15160	19.79	17815	16.84	26040	11.52

RELAYSTATION: Bonaire, Neth. Antilles: mw 525 kW; sw 260 kW. **G.C:** 68.17E/12.09N – 800 kc 375 m – 9590 kc 31.28 m – 15220 kc 19.71 m.
OPERATION SCHEDULE: I=So.Africa/Eu; II=Middle East; III=No.Africa; IV=Greater Caribbean Area; V=West-Indies; VI=No.America; VII=New Zealand; VIII=Australia; IX=Africa/Europe; X=Asia/Australia; XI=M.East/Europe; XII=So.Asia; XIII=So.Asia/Europe; XIV=We.Africa; XV=So.America(So); XVI=So.America(No); XVII=Europe; XVIII=C.America/Mexico; XIX=Spain/No.Africa/Europe; XX=Africa; XXI=So.America/Spain/No.Africa; XXII=So.+C.America.

Language	Areas	November–May (between brackets March/April freq's)
Afrikaans		**kc**
16.00–16.50 (W)	I	21625, 11730, 6020 (21480, 11730, 6020)
Arabic		
14.30–15.50 (D)	II	21480,11730
17.30–18.50 (D)	III	9715, 6085
Dutch		
01.10–01.30 (D)	IV	800 B
01.00–01.10 (Sun)	V	11730, 9715, 9590, 6085, 6020
02.30–03.50 (D)	VI	9590 B
06.00–07.20 (Sun)	VII	9525, 6020
06.00–07.20 (W)	VII	11730, 9525, 6020
08.30–09.50 (Sun)	VIII	21570, 9715
08.30–09.50 (W)	VIII	21570, 11730, 9715
09.00–10.20 (Sun)	IX	21480, 11730, 6020 (21480, 17830, 6020)
10.00–11.20 (Sun)	X	21570, 15425
11.30–11.50 (W)	XI	21480, 11730, 6020
11.30–12.50 (D)	XII	21570, 15425
13.00–14.20 (D)	XIII	21570, 15425, 6020
16.30–16.50 (Sun)	V	21570, 17810 (25610, 21570)
17.30–18.50 (D)	IX	17775, 11730, 6020
Dutch		**kc**
19.00–19.20 (Sun)	V	15425, 11730 (21570, 17810)
20.00–21.20 (D)	XIV	15220 B
20.30–21.50 (Sun)	VI	9590, 6085 (11730, 9590)
22.00–23.20 (D)	XV	11730, 9590 (15425, 11730)
23.30–00.50 (Sun)	V	11730, 9715, 9590, 6085, 6020
23.30–01.20 (W)	V	9590, 6085
English		
00.20–01.10 (W)	IV	800 B
01.30–02.20 (D)	VI	9590 B
07.30–08.20 (W)	VII/VIII	11730, 9715, 9525
14.30–15.20 (W)	XIII	17810, 15425, 6020 (21570, 17810, 6020)
17.00–17.15 (*)	VI	15425, 11730 (17810, 15425)
19.00–19.50 (W)	IX	9590, 6085, 6020 (11730, 9590, 6020)
20.00–20.50 (W)	XVII	9590, 6085, 6020 (11730, 9590, 6020)
20.35–20.50 (*)	VI	15425, 11730 (15425, 11950)
21.00–21.50 (W)	VI	9590, 6085 (11730, 9590)
21.30–22.20 (D)	XIV	15220 B
Indonesian		
12.00–13.00 (D)	XIII	21480, 17810, 6020
13.15–14.15 (D)	XII	21480, 17810
Spanish		
00.30–01.20 (W)	XVI	11730, 9715
04.00–04.50 (D)	XVIII	9590 B
15.30–15.45 (*)	XV	21570, 17810 (25610, 21570)
16.00–16.15 (*)	XVI	21570, 17810 (25610, 21570)
19.45–20.00 (*)	XVI	15425, 11730 (21570, 17810)
20.10–20.25 (*)	XV	15425, 11730 (21570, 17810)
21.30–22.20 (W)	XIX	9715, 6020 (11950, 9715, 6020)
22.30–22.45 (*)	XV	9715, 6085 (15320, 9715)
22.30–23.20 (D)	XV	15220 B
23.30–00.20 (W)	IV	800 B
News in various languages		
16.30–17.20 (W)	V	21570, 17810 (25610, 21570)
19.00–20.05 (W)	V	15425, 11730 (21570, 17810)
21.00–21.20 (W)	V	15425, 11730 (17810, 15425)
23.10–00.05 (W)	V	11820, 9715 (15320, 9715)
01.30–02.00 (W)	V	11730, 9715, 6085
Happy Station (English version)		
06.00–07.20 (Sun)	VII	11730, 9715
07.30–08.50 (Sun)	VIII	11730, 9525
10.30–11.50 (Sun)	XVII	9715, 6020, 5980
14.30–15.50 (Sun)	XIII	17810, 15425, 6020 (21570, 17810, 6020)
16.00–17.20 (Sun)	XX	21625, 11730, 6020 (21480, 11730)
19.00–20.20 (Sun)	VI	9590, 6085 (11730, 9590)
Happy Station (Spanish version)		
20.30–21.50 (Sun)	XXI	11730, 9715, 6020 (15425, 11950, 6020)
22.00–23.20 (Sun)	XXII	9715, 6085, 6020 (15320, 9715, 6020)
Happy Station (English/Spanish version)		
23.30–01.10 (Sun)	IV	800 B
Holandés por Radio (**)		
19.30–19.50 (Sun)	XXI	15425, 11730, 6020 (21570, 17810, 6020)
20.00–20.20 (Sun)	XXII	15425, 11730, 6020 (21570, 17810, 6020)
Dutch by Radio (***)		
05.30–05.45 (Sun)	VII/VIII	(11730, 9715, 9525, 6020)
07.30–07.45 (Sun)	IX	(21570, 15320, 6020)
08.00–08.15 (Sun)	XIII	(21570, 15320, 6020)
16.00–16.15 (Sun)	XII	(17810, 15425, 6020)
17.00–17.15 (Sun)	VI/XVII	(17810, 15425, 6020)

*=Tues and Fri only; B=via relaystation Bonaire; **=broadc. on Wed during Spanish tr's and repeated on Sun as indicated. ***=broadc. on Wed during Englisn tr's and repeated on Sun as indicated.

PROGRAMME SCHEDULE
NATIONAL MUSIC: The Amsterdam Concertgebouw Orchestra: In Dutch: Thurs 06.26, 08.56, 11.56, 13.26, 17.56, 20.26, 22.26, 23.56, 02.56. **Indonesian:** Sun 12.10, 13.25 – **Other Prgr. of Dutch music: Afrikaans** Mon 16.15. **Arabic** Tues 15.35, 18.35, Wed 14.48, 17.48, Thurs 14.47, 17.47. **English** Sun 21.30, 01.30. **Spanish** Sun 22.30, 04.00, Thurs 22.45, 00.45, 04.15.

NEWS, COMM: Afrikaans: W 16.00. **Arabic:** D 15.00, 18.00 **Dutch:** D 06.00, 08.30, 11.30, 13.00, 16.30, 17.30, 20.00, 22.00, 23.30, 01.10, 02.30. **English:** W 07.30, 14.30, 19.00, 20.00, 21.00, 21.30, 00.20, 01.30. **Indonesian:** D 12.00, 13.15. **Spanish:** W 21.30, 22.30, 23.30, 00.30, 01.30, 04.00.

LISTENER REQUEST PRGR: Afrikaans: Sat 16.10. **Arabic:** Sun 15.30, 18.30, Fri 15.10, 18.10. **Dutch:** Tues 06.29, 08.59, 11.59, 13.29, 17.59, 20.29, 22.29, 23.59, 02.59. **English:** Tues 07.42, 14.42, 19.12, 20.12, 21.12, 21.42, 00.32, 01.42. **Indonesian:** 1st, 4th and 5th Tues 12.23, 13.38, Sat 12.22, 13,37. **Spanish:** Mon 22.50, 23.50, 00.50, 04.20; Thurs 21.45.

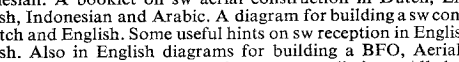
DX-PROGRAMMES: English Thurs 07.42, 14.42, 19.12, 20.12, 21.12, 21.42, Fri 01.42.

MAILBAG: Afrikaans: Wed 16.15. **Arabic:** Sun 15.10, 18.10, Thurs 15.10, 18.10. **Dutch:** Sat 06.20, 08.50, 11.50, 13.20, 17.50, 20.20, 22.20, 23.50, 02.50. **English:** 2nd Fri 08.03, 15.03, 19.33, 20.33, 21.33, 22.03, 00.53, 02.03. **Indonesian:** Sun 12.35, 13.50. **Spanish:** Mon 22.50, 23.50, 00.50, 04.20, Thurs 21.45.

LANGUAGE COURSES: Dutch by Radio, Radio Nederlands' English Dutch-language course is scheduled to commence in March 1967. Enrolment is now open. Write for full details and free textbook. **Holandés por Radio** (broadcast on Wed and repeated on Sun): Wed 00.59, 04.29, 21.59, 22.59, Sun 19.30, 20.00.

PRODUCTION "HAPPY STATION": The "Happy Station" Sun prg's 6 in English and 2 in Spanish & Portuguese on sw, 1 in Spanish, Portuguese and English on MW. Producer Edward Startz, on the air for almost 35 years, brings a wide range of music for all tastes, short features, descriptive commentaries and educational quizzes. Each tr carries a mailbag, calling to all parts of the world. The "Happy Station" prgr's Every Sun. (for freq's see operating schedule).

RELAY SERVICE: twice weekly news-behind-the-news prgr. from correspondents in European capitals for stations in U.S., Canada and Latin-America.
ANN: Dutch: "Hier is R. Nederland Wereldomroep in Hilversum". **English:** This is R. Nederland, the Dutch World Broadcasting System". **Indonesian:** "Disini Hilversum Siaran Indonesia R. Nederland". **Spanish:** "Aqui R. Nederland, Hilversum, Holanda". **Arabic:** "Idha-'atu 'l holanda 'l Arabiya fi Hilversum". **Afrikaans:** "Dit is R. Nederland Wereldomroep in Hilversum, Holland"..
GENERAL INT-SIG: Old Dutch folk song called: Merk toch hoe sterck", played on carillon or celeste – V. by QSL-card.



PUB: Prgr. sched in Dutch, English, Spanish, Arabic, Afrikaans, Indonesian. A booklet on sw aerial construction in Dutch, English, Spanish, Indonesian and Arabic. A diagram for building a sw converter in Dutch and English. Some useful hints on sw reception in English and Spanish. Also in English diagrams for building a BFO, Aerial filter and Crystal calibrator. Monthly frequency predictions. All the pub. are sent free of charge on application.

TRANSCRIPTION SERVICE: a free sce, to foreign stns issues complete prgr about Holland and Dutch life both informative and musical, and adapted to suit the requirements of the areas served – **FI:** By license payments.

RADIO BLOEMENDAAL (Rlg.)
(Operated by Reformed church of Bloemendaal) – **ADDR:** P.O. Box 26, Bloemendaal – **STATION:** 1223kc 245.3m 0.05kW.
D.PRGR: Sun 08.30–11.00, 14.15–16.00 (Rlgs. services only) – V. by QSL-card.

HUNGARY

L.T: GMT+1 h – **Pr.L:** Hungarian.
MAGYAR RADIO ES TELEVIZIO (Gov.)
ADDR: Brody Sandor-S.U. 5–7, Budapest VIII. **Cable:** Magyarrádió. **Te:** 338–330. **Telex:** 6-67 – **L.P:** Pres. & Gen. Mgr: I. Tömpe, Vice Pres: Dr. I. Hárs, Dr. K. Kiss. Dir. Adm: G. Mike. Dir. Tec: F. Bognár. Dir. For. Rel: Mrs. dr. V. Szarka.

HOME SCE:	kc	m	kW		kc	m	kW
Kossuth, Budapest[1]	539	556,5	135	Szombathely[2]	1340	223,8	25
Petöfi II Budapest[2]	872	344.0	36	Pécs[2]	1340	223.8	15
Petöfi I, Szolnok[2]	1187	252.7	135	Györ[2]	1349	223.3	0.4
Balatonszabadi	1250	240	135	Szolnok[2]	1349	223.3	0.4
Nyiregyháza[2]	1340	223.8	25	Miskolc[2]	1594	188.2	15
				Magyaróvár[2]	1594	188.2	0.4
				Balatonszabadi[2]	1594	188.2	15

[1] W: 03.30–00.30, Sun: 05.00–00.30 – [2] W: 04.00–07.10, 13.00–22.15, Sun: 05.30–22.15. Reg st's: rel. R. Petöfi exc. for reg. prgr's at 18.00–19.00 (Pécs 17.00–20.00, Györ 19.00–20.00, Sun also 09.00–10.00). **R. Kossuth: N, Wrp:** W: 03.30, 04.30, 05.00, 09.00, 11.00, 14.00, 16.00, 19.00, 21.00, 23.00. Sun: 05.00, 07.00, 11.00, 16.00, 19.00, 21.00, 23.00. **R. Petöfi: N:** W: 05.00, 07.00, 15.00, 17.00, 18.00, 20.00, 22.00. Sun: 22.00. **FM:** Budapest 66.62Mc 2kW – Pécs 69.02Mc, 2kW: 17.00–21.00. **German** (for Hungarian-Swabians): D 17.30–18.00 on 1340kc (Pécs). **ANN:** "Kossuth Radio, Budapest – Petöfi Radio, Budapest".

FOREIGN SERVICE

STATIONS (G.C: 18.24E/47.10N) 5/15/100/135kW.

kc	m	kc	m	kc	m	kc	m
539	556.5	6140	48.86	9540	31.45	17795	16.86
1250	240.0	6234	48.10	9833	30.51	17890	16.77
3995	75.09	7100	42.25	11910	25.19	21665	13.85
5902	50.83	7220	41.55	15160	19.79	21685	13.83

TO EUROPE: 6/11-66–4/3-67 **5/3–6/5-67**

English	kc	kc
19.30–20.00	3995/5902/7100/9833 17795/17890/21665/21685	3995/7220/9833/11910 17795/17890/21665/21685
22.00–22.30	3995/5902/6234/7100 7220/9833	3995/6234/7100/7220/9833
23.30–24.00	539/3995/6234	539/3995
Esperanto		
19.30–19.45	1250/6234/7220	1250/6234/7100
German		
17.45–18.30	1250	1250/7100
19.45–20.00	1250/6234/7220	1250/6234/7100
21.30–21.45	1250/3995/6234/7220	1250/3995/6234/7100
09.00–10.00*	1250/3995/5902/6239/7100	1250/6234/7100
13.30–14.00*	1250/6234/7100/9833 11910/15160/17795 17890/21665/21685	1250/7220/9833/11910 15160/17795/17890/21665 21685
13.30–14.00**	1250/6234/7100/9833 11910/15160/17795 17890/21665/21685	1250/7220/9833/11910 15160/17795/17890 21665/21685
Greek		
11.45–12.00	6234/7220/9833/11910 15160/17795/17890 21665/21685	7220/9833/11910/15160 17795/17890/21665/21685
17.00–17.30	1250/6234/7100/9833 11910/15160/17890 17795/21665/21685	1250/7100/7220/9833 11910/15160/17795/17890 21665/21685
20.00–20.15	1250/3995/5902/6234 7100/7220/9833	1250/3995/6234/7100 7220/9833/11910
08.00–08.45*	3995/5902/6234/7100 7220	6234/7220/9833/11910
12.00–13.00*	6140/7100/9833/11910 15160/17795/17890 21665/21685	6234/7220/9833/11910 15160/17795/17890 21665/21685
15.00–16.00**	7100/7220/9833/11910 15160/17795/17890 21665/21685	7100/9833/11910/15160 17795/17890/21665/21685
Hungarian		
19.00–19.30	1250/3995/5902/6234 7100/7220/9833/17795 17890/21665/21685	1250/3995/6234/7100/9833 15160/17795/17890/21665 21685
20.30–21.30	1250/3995/5902/6234 7100/7220/9833	1250/3995/6234/7100/7220 9833/11910
14.00–16.00*	1250/6140/7220/9833 11910/15160/17795/17890 21665/21685	1250/6234/7220/9833/11910 15160/17795/17890/21665 21685
05.00–05.15a	3995/6234/7220/9833 11910/15160/17795/17890 21665/21685	1250/6234/7220/9833/11910 15160/17795/17890/21665 21685
11.00–11.15a	6234/7220/9833/11910 15160/17795/17890/21665 21685	1250/6234/7220/9833/11910 15160/17795/17890/21665 21685
Italian		
11.30–11.45	6234/7220/9833/11910 15160/17795/17890/21665 21685	1250/6234/7220/9833 11910/15160/17795/17890 21665/21685
17.30–17.45	1250	–
18.30–19.00	1250/6234/7220	1250/9833
20.15–20.30	1250/3995/6234/7220	1250/3995/6234/7100
13.00–13.30*	6234/7100/9833/11910 15160/17795/17890/21665 21685	6234/7220/9833/11910 15160/17795/17890/21665 21685
Spanish		
20.15–20.30	5902/7100/9833	7220/9833/11910
21.30–22.00	5902/7100/9833	7220/9833/11910

TO NEAR EAST

Arabic	kc	kc
17.30–18.30	6234/7100/9833/11910 15160/17795/17890/21665 21685	7220/9833/11910/15160 17795/17890/21665/21685
14.00–15.00***	7100/7220/9833/11910	7220/9833/11910/15160
**	15160/17795/17890/21665 21685	17795/17890/21665/21685
Turkish		
10.00–12.00*	7100/7220/9833/11910 15160/17795/17890/21665 21685	7220/9833/11910/15160 17795/17890/21665/21685
16.00–17.00	1250/6234/7100/9833 11910/15160/17795/17890 21665/21685	7100/7220/9833/11910 15160/17795/17890/21665 21685
18.30–19.00	3995/7100/9833/11910 17795/17890/21665/21685	3995/6234/7100/11910 15160/17795/17890/21665 21685

NEWS!
VIEWS!
DEBATE!

from **RADIO BUDAPEST**

life in Hungary and International affairs

Special programmes for Radio Enthusiasts!

DX-programmes in English and German, Around the world
fresh DX-news – Tips for DX-ers on Broadcast and Ham Bands
DX-peditions
Histories of DX-organisations
Stories about our DX-ers
News of RBSWC
Wave propagation forecasts
DX Contests.

Short Wave Clubs are Invited to Join the Radio Budapest Short Wave Club

An international non-commercial DX-organisation for all enthusiasts of the scientific hobby of Radio – members on all six continents plus local organisations in many countries. RBSWC WW HQ programmes are on the air every Tuesday and Sunday to Europe and North America. In German every second Sunday. Membership fee – no charge. Monthly DX-Bulletin for members. QSL cards and station stationary. Reception Report Forms. Write for your application form today to:

RBSWC WW HQ.,
c/o DX PROGRAMME,
RADIO BUDAPEST, HUNGARY.

see HUNGARY page 110

TO NORTH AMERICA

English	kc	kc
00.30–01.00	6234/7220/9540/9833	7220/9833/11910/15160
01.30–02.00	6234/7220/9540/9833	7220/9833/11910/15160
03.00–03.30	6140/6234/7220/9833	7220/9833/11910/15160
03.30–04.00(M)	6140/6234/7220/9833	7220/9833/11910/15160
04.30–05.00	6140/6234/7220/9833	7220/9833/11910/15160
Hungarian		
00.00–00.30	7220/9540/9833	9833/11910/15160
02.00–03.00	6140/6234/7220/9833	7220/9833/11910/15160
04.00–04.30	6140/6234/7220/9833	7220/9833/11910/15160

TO LATIN AMERICA

Hungarian	kc	kc
23.00–23.30b	7100/6140/9833/11910	9833/11910/15160/17795
Spanish		
23.30–24.00b	7100/9540/9833	9833/11910/15160/17795
01.00–01.30c	6234/7220/9540/9833	7220/9833/11910/15160

*) Sun only; **) Sat only; ***) Fri only; M) Music; a) Home News (rel. R. Kossuth); b) to So. America; c) to Ce. America.

DX-PRGR: English: Tues/Wed 19.30, 00.30, 03.00; Sat/Sun (repeats) 22.00, 23.30, 01.30, 04.30. German: 2nd & 4th Sun 09.00.
ANN: E: "This is Budapest, Hungary"
INT-SIG: R. Kossuth: Played on 3 clarinets & 1 bass clarinet. R. Petöfi: 3 flutes, 2 violins, 1 cello, 1 doublebass. Foreign Sce: Excerpts from the Suite "1848" by T. K. Polgar (3 trumpets, 2 cornets).
V. by QSL-card, Recordings accepted – **ALF:** Forints 120,-

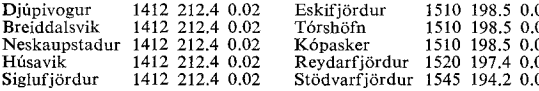
ICELAND

L.T: GMT – 1 h (Su. = GMT) – **Pr.L:** Icelandic.
ICELAND STATE BROADCAST SERVICE – RIKISUTVARPID (Gov.)
ADDR: P.O. Box 120, Reykjavik. **Cable:** Utvarp – **L.P:** Dir. Prgr. Council: B. Groendal. Dir. Gen: V. Th. Gislason. Dir. Adm: G. Vagnsson. Dir. Sound Radio: G. Jónsson. Dir. N: J. Magnusson.
HOME SCE: Mon–Fri 08.00–11.00, 13.00–00.30. Sat 08.00–11.00, 13.00–01.00. Sun 09.30–00.30

STATIONS:	kc	m	kW
Reykjavik	209	1435	100
Eidar	209	1435	20
Höfn	665	451.2	5
Akureyri	737	407.1	5
Alftafjördur	1133	264.8	0.02
Lón	1412	212.4	0.02
Djúpivogur	1412	212.4	0.02
Breiddalsvik	1412	212.4	0.02
Neskaupstadur	1412	212.4	0.02
Húsavik	1412	212.4	0.02
Siglufjördur	1412	212.4	0.02
Fáskrudsfjördur	1484	202.2	0.02
Raufarhöfn	1484	202.2	0.02
Skúlagardur i			
Kelduhverfi	1484	202.2	0.02
Hellissandur	1489	201.4	0.02
Eskifjördur	1510	198.5	0.02
Tórshöfn	1510	198.5	0.02
Kópasker	1510	198.5	0.02
Reydarfjördur	1520	197.4	0.02
Stödvarfjördur	1545	194.2	0.02

FM	Mc	kW
Reykjavik	98	0.6
Reykjavik	94	0.03
Vestmannaeyjar	89.1	0.2
Neskaupstadur	91	0.03
Raufarhöfn	91	0.03
Skúlagardur i		
Kelduhverfi	91.5	0.2
Vik	98	0.005

N: W 09.30, 13.30, 16.00, 17.00, 20.30, 23.00. Sun 09.55, 13.30, 20.30, 23.00. – **ANN:** "Utvarp Reykjavik" – **V.** by QSL-card. Rp. – **ALF:** Kr. 620,–. **INT-SIG:** Home Service.



ARMED FORCES RADIO & TV SCE: see USA.

IRELAND

L.T: GMT (Su: GMT – 1 h) – **Pr.L:** Irish, English.
RADIO TELEFIS EIREANN (Statutory Corporation)
ADDR: Henry Str, Dublin 1. **Te:** 42981. **Cable:** Broadcasting – **L.P:** Chmn: Dr. C. S. Andrews. Dir. Gen: K. C. McCourt. Contr. of Prgr's (Radio): R. O. Farachain. Dir. of Eng: P. G. Parker. Dir. of Pub: J. P. McGuinness. Adv. Sales Mgr: R. K. Gahan.
STATIONS: Athlone 566kc 539m 100kW – Dublin 1250kc 240m 10kW – Cork 1250kc 240m 10kW.
FM: Kippure 95.3Mc 50kW – Truskmore 89.7Mc 100kW – Maghera 94.1Mc 100kW – Mullaghanish 93.5Mc 100kW – MtLeinster 94.9Mc 100kW.
HOME SCE: W 08.00–15.00, 17.00–23.35. Sun 10.15–23.45.
N: English: 08.00(W), 09.00(W), 10.15(Sun), 13.30, 15.00(W), 18.30, 22.00(Sun), 22.15(W), 23.30(W), 23.40(Sun). **Irish:** 18.01, 22.00(W) – **Wrp: English:** 08.10(W), 09.10(W), 10.15(Sun), 13.30, 17.55, 18.30, 22.00(Sun), 22.15(W), 23.30(W), 23.40(Sun) – **Irish Music:** 11.15–11.45(W), 22.30–23.00(Sat) – **ANN:** "R. Telefis Eireann" – **INT-SIG:** Celeste and Harp playing 4 bars of Irish air "O'Donnell Abu" – **V.** by letter – **PUB:** RTE Guide – **FI:** By licence payments and adv – **AD:** 33 h per week – **ALF:** £ 1–5–0.

ITALY

L.T: GMT + 1 h (Su: GMT + 2 h) – **Pr.L:** Italian.
RAI – RADIOTELEVISIONE ITALIANA
(State Service by public act to RAI).
ADDR: Via del Babuino 9, Roma. **Te:** 3878. **Cable:** Raidirro. **Telex:** 61142-L.P: Pres: P. Quaroni. Vice Pres: Dr. L. Paolicchi. I. De Feo. Man. Dir: Dr. G. Granzotto. Dir. Gen: Dr. E. Bernabei. Vice Dir. Gen: Dr. M. Bernardi. Dir. For. Rel: Dr. G. Zaffrani. Dir. Adm: Dr. B. Vasari. Dir. Prgr: Dr. L. Piccioni. Dir. Radio & TV Inf. Sce's: Dr. A. Manusardi. Dir. Tec: Eng. G. Castelnuovo. Co. Dir: Eng. E. Cristofaro. Dir. Gen. Aff: Dr. A. Passante. Chief Pers: vacant. Dir. "Radiocorriere": Dr. Ugo Zatterin.
HOME SCE: No Powers indicated owing to pending changes.

MEDIUM WAVES	Nat. prgr. kc	2 prgr. kc	3 prgr. kc
Aosta 1)	1331	1115	
Alessandria 1)		1448	
Biella 1)		1448	
Cuneo 1)		1448	
Torino 1)	656	1448	1367
Como 2)		1448	
Milano 2)	899	1034	1367
Sondrio 2)		1448	
Bolzano 3)	656	1484	1594
Bressanone 3)		1484	1594
Brunico 3)		1448	1594
Merano 3)		1448	1594
Trento 3)	1331	1448	1367
Belluno 4)		1448	
Cortina 4)		1448	
Venezia 4)	656	1034	1367
Verona 4)	1578	1448	1367
Vicenza 4)		1484	
Gorizia 5)	1578	1484	
Trieste 5)	818	1115	1594
Udine 5)	1331	1448	
Trieste A 5) (autonome in Slovene)	980		
Genova 6)	1331	1034	1367
La Spezia 6)	1578	1448	
Savona 6)		1484	
S. Reno 6)		1034	
Bologna 7)	1331	1115	1367
Arezzo 8)		1484	
Carrara 8)	1578		
Firenze 8)	656	1448	1367
Livorno 8)	1061		1594
Pisa 8)		1115	1367
Siena 8)		1448	1367
Perugia 9)	1578	1448	
Terni 9)	1578	1484	
Ancona 10)	1578	1448	
Ascoli P. 10)		1448	
Roma 11)	1331	845	1367
Aquila 12)	1578	1484	
Campob. 12)	1578	1448	
Pescara 12)	1331	1034	
Teramo 12)		1484	
Avellino 13)		1484	
Benevento 13)		1448	
Napoli 13)	656	1034	1367
Salerno 13)		1448	
Bari 14)	1331	1115	1367
Brindisi 14)	1578	1484	
Foggia 14)	1578	1448	
Lecce 14)	1578	1448	
Salento 14)	566	1448	
Taranto 14)	1578	1448	
Matera 15)	1578	1448	
Potenza 15)	1578	1448	
Catanzaro 16)	1578	1448	
Cosenza 16)	1578	1448	
Reggio C 16)	1578		
Agrigento 17)	1578	1448	
Catania 17)	1331	1448	1367
Caltanissetta 17)	566	1448	
Messina 17)		1115	1367
Palermo 17)	1331	1448	1367
Cagliari 18)	1061	1448	1594
Nuoro 18)	1578	1484	
Sassari 18)	1578	1448	1367

1) Piemonte, 2) Lombardia, 3) Trentino, Alto Adige, 4) Veneto, 5) Venezia, Giulia, Friuli, 6) Liguria, 7) Emilia, Romagna, 8) Toscana, 9) Umbria, 10) Marche, 11) Lazio, 12) Abruzzi, Molise, 13) Campania, 14) Puglia, 15) Basilicata, 16) Calabria, 17) Sicilia, 18) Sardegna.
FM: 1485 st's in Nat, 2nd, 3rd and 4th prgr.
NATIONAL PRGR: 05.30–22.30.
N, Wrp: 06.00(W), 07.00, 09.00(W), 11.00(W), 12.00, 14.00, 16.00(W), 19.00, 22.00 – **Maritime Wrp:** 05.30, 13.55 – **Rlg. Sce:** Sun 06.40 (Evangelistic), 08.30 (Mass from R. Vaticana) – **L.L:** W 05.35 – **Reg. Sce's:** Mon–Fri 13.00–13.55 on all st's marked 1), 3), 7), 13), 14), 17) (mw & FM st's only).
2nd Prgr: 06.30(Sun 06.00)–21.45.
N: Every h 07.30–21.30 (exc. 11.30, 19.30) – **Prgr. for Tourists** (May–Sept): W 06.30–07.00. N. & Information in French (06.30 rel ORTF), German (06.40 rel WDR), English 06.50 rel BBC or VOA) – **Reg. Sce's:** 11.20(Sun 11.30)–12.00 (mw & FM st's only).
3rd Prgr: 17.30(Sun 15.30)–22.15 (approx.) **N:** 20.00 – **Concert:** 18.30. **Network 3** (cultural prgr's): W 09.00–17.30. Sun 08.30–15.30 (until 16.00 on FM III only, 16.00–17.30 on FM III and mw-st's).
Night Prgr. (Notturno dall'Italia): On 845kc. Prgr. details see sw.
Special Reg. Sce's:
R. Naples III (1367kc): **English:** 06.00–07.50 for Tourists.
R. Trieste A (980kc): **Slovene:** W 06.00–07.30, 10.30–13.30, 16.00–22.30 (Sat 10.30–22.30). Sun 07.00–22.30. **N:** 06.15(W), 07.15, 12.15, 13.15, 16.15(W), 19.15, 22.15.
R. Bolzano: German: On 656kc: W 13.45–13.55. On 1594/1448kc: 06.00–07.00(W), 08.30(Sun 07.00)–11.30, 12.00–13.00, 16.00(Sun 15.00)–18.00, 18.15–20.20. **N:** 06.15(W), 11.10, 12.15, 13.45(W), 18.45. **Ladino:** W 13.20–13.45 on 656/1331kc, Mon 17.30–18.00 on 1594kc.

LOWEST
AIR FARES BETWEEN EUROPE AND U.S.A.

Now is the time to take advantage of Icelandic's incredibly low Thrift Season fares. Lowest of any scheduled airline at anytime of the year . . . one way or all-year round trips. Pay far less than Jet Economy fares. New faster service, too! Swift, new Rolls-Royce 400 Jet Props are in full service from Luxembourg to Iceland and New York. Service from other Icelandic terminals is via long-range DC-6Bs to Iceland—connecting with Rolls-Royce 400 Jet Props to New York. Complimentary meals, drinks, snacks. There is no doubt about it . . . Icelandic is your best sky-buy to the U.S.A.

Information, reservations from any Travel Agent or our offices and General Agents in Amsterdam • Ankara • Antwerp Athens • Belfast • Beirut • Bergen • Bruxelles • Chicago Copenhagen • Frankfurt/Main • Geneve • Glasgow Gothenburg • Hamburg • Helsinki • Johannesburg London • Luxembourg • New York • Oslo • Paris Reykjavik • Rome • San Francisco • Stavanger Stockholm • Tel Aviv • Zurich

LOFTLEIDIR
ICELANDIC AIRLINES

FROM ALL THESE CITIES

AMSTERDAM
COPENHAGEN
FRANKFURT†
GLASGOW
GOTHENBURG
HAMBURG†
HELSINKI
LONDON
LUXEMBOURG
OSLO
PARIS†
REYKJAVIK

†via Luxembourg Amsterdam, Copenhagen or London

Daily scheduled flights all year between Europe and U.S.A. via Iceland.

SHORT WAVES:
Nat. Prgr: Caltanissetta 6060kc 49.50m 25kW – 9515kc 31.53m 5kW: W 05.30–13.00, 13.55–22.30. Sun 05.30–22.30.
2nd Prgr: Caltanissetta 7175kc 41.81m 5kW: W 06.30–11.20, 12.00–21.45. Sun 06.00–13.00, 13.30–21.45.
3rd Prgr: Roma 3995kc 75.09m 5kW: 17.30(Sun 15.30)–22.15(approx).
Night Prgr. (Notturno dall'Italia) on 6060/9515kc: 21.45–05.25. 7 h of music-parade: songs, melodies, opera music, dance music, folklore songs, symphony, operetta and jazz, with short **newsbulletins** in four languages (**Italian & English** each full h, **French & German** every h on the half h). Sun: "Holiday for a Continent" musical divertissement presented in Italian, English, French and German.

FOREIGN SERVICE
ADDR: via del Babuino 9, Roma. **Te:** 3878.
STATIONS: Rome: 5/50/60/100kW (G.C: 12.31E/41.48N); Caltanissetta: 5/25kW (G.C: 14.04E/37.30N).

1) Caltanissetta – 2) Rome – 3) Bari.

	kc	m	kc	m	kc	m	kc	m
1)	556	530.0	6060	49.50	9540	31.45	15150	19.80
2)	845	355.0	6095	49.22	9575	31.33	15325	19.58
3)	1115	269.0	7235	41.47	9630	31.15	15385	19.50
3)	1331	225.4	7240	41.44	9710	30.90	15400	19.48
	5960	50.34	7275	41.24	11800	25.42	17770	16.88
	5990	50.08	7290	41.15	11810	25.40	17800	16.85
	6010	49.92	9515	31.53	11905	25.20	21560	13.91
	6050	49.59						

EUROPEAN SERVICE: "Rome Calling Europe"

Albanian kc
13.00–13.30 7235, 9575

Bulgarian
15.20–15.40 6050, 7290, 9630

Czech
13.25–13.45 7290, 9630, 11800
21.15–21.40 5960, 5990, 7275

Danish/Swedish*
16.35–16.50 7275, 9710

English
21.15–21.35 6050, 7240[1]
[1] to Gt. Britain.

Esperanto
16.35–16.50(Sun) 7275, 9710

French
12.35–12.55 7235, 9575

German
16.10–16.30[2] 6010, 7275
16.55–17.15[3] 6050, 7235, 7290
17.20–17.40[4] 6050, 7235, 7290
[2] to Ea. Germany; [3] to Austria; [4] to We. Germany.

Greek
15.20–15.40 6010, 7235

Hungarian
13.35–14.00 7235, 9575

Italian
12.00–12.25 7235, 9575
15.45–16.50 6050, 7235, 7290
19.10–19.45 5990, 6050, 7275

Lithuanian kc
19.50–20.05 5990, 6050, 7275

Maltese
12.25–12.30 7235, 9575

Polish
14.05–14.25 7290, 9630, 11800
21.40–22.00 5960, 5990, 7275

Portuguese
21.40–22.00 6050, 7240

Rumanian
15.45–16.05 6010, 7275
20.05–20.15 5990, 6050, 7275

Russian
03.30–03.45 6095, 7275, 9710
14.05–14.25 9575, 11905
18.10–18.35 6050, 7235

Serbo-Croat
14.30–14.50 6010, 6050, 7290
18.10–18.35 5990, 6010, 7275

Slovak
13.45–14.05 7290, 9630, 11800
22.00–22.25 5960, 5990, 7275

Slovene
14.55–15.15 6010, 6050, 7290

Spanish
17.45–18.05 6050, 7275

Turkish
14.30–14.50 7235, 9630

Ukraine
03.30–03.45 6010, 7235
* Danish: Tues, Thurs, Sat; Swedish: Mon, Wed, Fri.

GENERAL OVERSEAS SERVICE

AU, NZ, FAR EAST

English kc
22.05–22.25 6010, 9710

Italian
12.00–12.55 15325, 17770, 21560
20.45–21.10 6050, 7275, 9575, 9710, 11905

TO AFRICA

Amharic kc
20.20–20.40 9710, 11810, 15150

French
14.55–15.15 7235, 9630

Italian
18.40–19.20 15385, 17800
19.50–20.15 15150, 17770

Somali
19.20–19.45 15385, 17800

TO NEAR EAST

Arabic kc
13.00–13.20 11905, 15325, 17770

Arabic kc
16.55–17.15 6010, 7275
17.20–17.40 7275, 9575
17.45–18.05 7235, 9575, 11810

English
20.20–20.40 5990, 7275

TO MEDITERRANEAN

Arabic kc
13.47–13.55 566, 1331, 6060, 9515

Italian
13.40–13.47 566, 1331, 6060, 9515

TO LATIN AMERICA

Italian kc
18.40–19.05 11810, 15400, 17770
01.40–03.05 5960, 6010, 9630, 9710, 11905

Portuguese
01.20–01.35 9540, 9710, 11905

Spanish kc
01.00–01.20 9540, 9710, 11905
03.05–03.25 5960, 6010, 9630, 9710, 11905

French kc
01.20–01.35 6010, 9630

Italian
22.30–01.00 6010, 9540, 9630, 9710, 11905

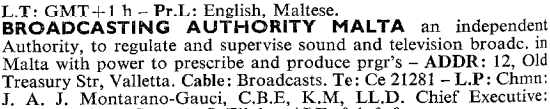
TO NO. AMERICA

English
01.00–01.20 6010, 9630

NEWS in English: 20.20, 21.15, 22.05, 01.00.
ANN: "RAI – Radiotelevisione Italiana, stazioni del (programma Nazionale, Secondo programma, Terzo Programma)". Night prgr: "RAI – Radiotelevisione Italiana stazioni a onda media di Roma 2kHz 845 pari a m. 355 e di Milano 1kHz 899 pari a m. 333.7 e stazioni ad onda corta di Caltanisetta kHz 6060 e 9515 pari a m. 49,50 e 31,53" – "Notturno dall'Italia" – Foreign Sce: I: "RAI – Radiotelevisione Italiana – stazioni ad onda corta di m. ...pari rispettivamenta a ...kHz – Trasmissioni in lingua italiana per...". E: "This is the Italian R. & Television Sce. Broadc. from Rome". F: "Ici la R. Italian". G: "Hier ist der italienische Auslandssendedienst in Rom".
INT-SIG: Bird chirping, opening signal: bells (composition by A. Parelli) – **V.** by QSL-card – **PUB:** "Radiocorriere" (weekly) for Home Sce. Prgr. schedule 3 times a year in E, F, G, I (Foreign Sce) – **ALF:** Lire 3.300,– – **FI:** By licence payments & adv – **AD:** 2,9% of broadc. time.

LUXEMBOURG

L.T: GMT+1 h – **Pr.L:** Luxembourgian, French.
RADIO LUXEMBOURG (Comm).
ADDR: Compagnie Luxembourgeoise de Télédiffusion, Villa Louvigny, Luxembourg. **Cable:** Radio Luxembourg. **Te:** 25881 – **L.P:** Dir. Gen: M. Felten. Secr. Gen: G. Graas. Dir. Prgr: J. Luc.
STATIONS (G.C: 06.19E/49.40N):
I 233kc 1287m 600kw – 15245kc 19.68m 5kW
II 1439kc 208m 350kW – 6090kc 49.26m 50kW.
FM: 92.5Mc 50kW – 97Mc 100kW
HOME SCE. in Luxembourgian on 92.5Mc: W 10.30–13.00, 17.30–21.00; Sun 07.30–21.00 (18.00–19.00, also on 6090kc) – **N:** 11.45, 18.00, 18.30.
FOREIGN SCE: On 233/15350kc in French: W 04.20 (Sun 05.20)–02.00 – **N:** 05.00, 06.00, 06.30, 07.00, 07.30, 08.00, 09.00, 10.00, 11.00, 11.28, 12.00, 13.00, 14.00, 15.00, 16.00, 17.00, 18.00, 19.00, 20.00, 21.00, 22.00, 23.00, 24.00, 01.00, 02.00. Sun. 06.00, 06.30, 07.00, 08.00, 09.00, 10.00, 11.00, 12.00, 13.00, 14.00, 15.00, 16.00, 17.00, 18.00, 19.00, 19.45, 21.00, 22.00, 23.00, 24.00, 01.00, 02.00 – **Rlg. Prgr's (French):** Sun 06.00–06.10, 07.30–07.45.
On 1439/6090kc in Dutch, German, English:
Dutch: Sun 04.30–13.00(W 04.00–11.00) **N:** W 06.32, 07.00, 08.00, 09.00, 10.00, 11.00(Sun 06.31, 07.37, 08.57, 11.00) – **German:** 05.15–06.30, 11.00(Sun 13.00)–18.30 (also on 97Mc) – **N:** W 06.15, 17.55 – **English:** 18.30(Sun 18.00) – 02.00 on 1439kc; also on 6090kc 19.00–02.00.
International Rlg. Prgr's:
On 1439/6090kc: W 04.00 05.15, Sun 04.30–06.30 in G, F, Polish, Russian, Hungarian, Slovenian (Thursday), 09.30–10.30 (also on 92.5Mc) – **On 6090kc only:** Mon 19.15–19.25 German, 19.00–19.15 (Tues: English, Wed: Polish, Thurs: Slovak, Fri: Russian, Sat: German) – **On 97Mc in German and English: German:** 05.00(Sun 06.00)–11.00, 11.00–18.30 relay 1439kc, 18.30–23.00 – **English:** 23.00–02.00 relay 1439kc.
ANN: F: "Ici R. Luxembourg". E: "This is R. Luxembourg". Dutch: "Hier is R. Luxembourg". G: "Hier ist R. Luxembourg". Luxembourgian: "Hei ass R. Letzeburg" –
INT-SIG: Melody played on piano: A Luxembourgian popular song.



V. by letter – **F.PL:** 233kc 1250kW – **ALF:** Bfrs 96,–.

MALTA (State of)

L.T: GMT+1 h – **Pr.L:** English, Maltese.
BROADCASTING AUTHORITY MALTA an independent Authority, to regulate and supervise sound and television broadc. in Malta with power to prescribe and produce prgr's – **ADDR:** 12, Old Treasury Str, Valletta. **Cable:** Broadcasts. **Te:** Ce 21281 – **L.P:** Chmn: J. A. J. Montarano-Gauci, C.B.E, K.M, LL.D. Chief Executive: J. A. Manduca; Secr: A. J. Ellul. – **ALF:** £ 1–0–0.
RADIO MALTA (Comm, a subsidiary of the Malta TV Service Ltd)
ADDR: P.O. Box 384, Gwardamanga. **Te:** 25051 – **L.P:** St. Mgr: W. A. Fenton. Chief Eng: A. J. Bartolo.
STATIONS (System Gates): 1214kc 247m 1kW – **FM:** 89.7Mc 1kW (ERP) – **D.PRGR. in Maltese &English** (test tr's only): Mon–Fri 12.00–13.30, 20.00–23.00; Sat 10.15–18.30, 21.00–24.00; Sun 10.15–18.30, 20.00–23.00. **V.** not wanted.

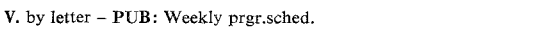
BRITISH FORCES BROADC. SCE. MALTA
is operated by the Ministry of Defence to provide a Service of inf, entertainment as well as a link with home for H.M. Forces in Malta. It is non-comm, does not accept paid adv – **ADDR:** B.F.P.O. 51, Malta – **L.P:** St. Contr: A. A. Hargreaves. Sen. Eng: R. J. Smith.
STATION: 1425kc 210.5m 1kW – **D.PRGR'S:** 08.00–11.00(W), 16.30(Sat/Sun 13.00)–22.15.
N: 08.15(W), 13.00(Sat/Sun only), 18.00, 22.00 – **ANN:** "This is the British Forces Broadc. Sce. Malta" – **INT-SIG:** "The Waltzing Bugle Boy" (Celeste) – V. by QSL-card. Rp – **PUB:** "Gwida" (weekly).

CENTRAL MEDITERRANEAN RELAY(Relays of BBC Arabic Sce.) for Libya/Tunesia: On 1178kc 254.5m 10kW: **Arabic:** 03.45–05.45, 11.00–21.00.

REDIFFUSION MALTA LTD. (Priv. Comm)
ADDR: P.O. Box 82, Gwardamanga. **Cable:** Rediffusion. **Te:** Central 25051 – **L.P:** Gen. Mgr: E. A. Hamilton-Hill, O.B.E. Mgr: J. N. Tabone. Chief Eng: A. J. Bartolo.
D.PRGR: Prgr I: 06.00–23.00. Mainly BBC (World Sce) with locally produced substitutions – Prgr II: Maltese 05.00–22.00. Local prgr's.

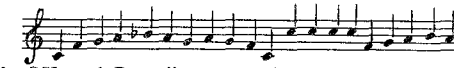
MONACO

L.T: GMT+1 h – **Pr.L:** French.
RADIO MONTE CARLO (Comm)
ADDR: B.P. 128, Monte Carlo. **Cable:** Radio Carlo. **Te:** 305252.
L.P: Dir. Gen: J. Maziol. Dir. Prgr's: M. Drouet. Dir. Inf: J. Debu-Bridel. Comm. Dir: R. H. Dogor. Chief Comm. Sce: M. Bosio. Chief Press Section: Jean Louis Medecin. Dir. Tec: G. Auvray.
STATIONS: (G.C: 07.26E/43.44N): 218kc 1376m 1250kW – 1466kc 205m 400kW – 6035kc 49.71m 30kW – 7135kc 42.05m 30kW – **FM:** 93.5Mc 30kW.
HOME SCE: 05.00–01.00 – **N:** From 06.00 to 18.00 every h on the h exc. 08.00, 18.30, 21.00, 23.00.
FOREIGN SCE: A 100kW sw-tr. in the 49, 41, 31, 25, 19 m.b. (see Trans World Radio).
Rel Prgr's (TWR): On 1466kc: 04.45–05.15, 21.00–23.00. **English:** 21.30–22.00, 22.00–22.30(Sun). **French:** 21.00–21.05. **German:** 04.45–05.15, 21.05–21.30. **Music:** 22.00–23.00 (this period to be gradually replaced with prgr's in different languages).
ANN: "Ici Monte Carlo" – **INT-SIG:** L'Hymne National Monégasque".



V. by letter – **PUB:** Weekly prgr.sched.

TRANS WORLD RADIO
ADDR: Rue de la Poste 5, P.O. Box 141, Monte Carlo. **Te:** 302233. **Cable:** Votan – **L.P:** Pres: E. Freed Ph.D. Dir. Gen: Ralph Freed D.D. Dir. Radio: B. L. Armstrong, M.A.B.D. Dir. Public Relations: D. Carlson.
STATIONS: 2×100kW (G.C: 07.26E/43.44N):
5960 kc 50.34 m 7290 kc 41.15 m 11960 kc 25.08 m
7260 kc 41.32 m 9630 kc 31.15 m
D.PRGR: Arabic: 13.35–13.50(Fri) on 7290kc, 18.10–18.25(Mon–Fri) on 9630kc – **Armenian:** 18.10–18.25(Sat/Sun) on 9630kc – **Bulgarian:** 14.15–14.45(Sun), 16.15–16.30(Sat) on 7290kc – **Czech:** 15.00–15.15 (Sun/Thurs/Sat) on 7290kc – **Dutch:** 09.00–09.30(Sat) on 7260kc – **English:** 07.30–08.45(D), 07.30–11.15(Sun), 13.00–14.15(Sun), 16.00–17.00(D) on 7260kc – **Estonian:** 17.30–17.45(Sun/Tues/Fri) on 9630kc – **Finnish:** 16.30–16.45(Tues/Fri) on 9630kc – **French:** 11.45–12.15(D) on 5960/7290kc – **German:** 08.35–08.50, 11.25–11.40 on 7290kc, 14.30–14.55 on 7260kc – **Greek:** 11.05–11.20(Sun), 13.35–13.50(Wed) on 9630kc – **Hebrew:** 17.50–18.05(D) on 9630kc – **Hungarian:** 16.30–16.45 on 7290kc – **Italian:** 12.20–12.35(D) on 5960kc – **Latvian:** 17.30–17.45(Mon/Wed/Thurs/Sat) on 9630kc – **Norwegian:** 18.00–18.30(D) on 9630kc – **Polish:** 16.00–16.15(Mon/Tues/Wed/Fri) on 7290kc – **Portuguese:** 17.00–17.15(Sun) on 9630kc – **Rumanian:** 13.45–14.15(Sun), 16.45–17.15(Wed) on 7290kc – **Russian:** 08.00–08.30(Sun), 15.20–15.55(D) on 11960kc, 17.15–17.30(Mon/Wed/Fri) on 9630kc – **Spanish:** 13.00–13.30(D) on 7290kc – **Ukrainian:** 15.05–15.20(Sun/Fri/Sat) on 11960kc – **Yugoslavian:** 13.30–13.45(Sun), 16.45–17.00(Wed) on 7290kc.
MW-Prgr (1466kc 400kW): D 04.45–05.15, 21.30–23.00.
Arabic (Wed, Thurs) 22.15–22.30. **Dutch** (Wed) 22.00–22.15. **English** 21.30–22.00(D), 22.00–22.45(Sun), 22.00–22.30(Mon), 22.00–22.15 (Tues). **French** 21.00–21.05(D), 22.00–22.15(Thurs, Fri), 22.45–23.00 (Sat). **German** (D) 04.45–05.15, 21.05–21.30. **Italian** 22.15–22.45(Fri), 22.15–22.30(Sat). **Portuguese** 22.45–23.00(Sun). Additional languages & prgr's to be added soon.
ANN: E: "This is Monte Carlo" or "You are listening to Monte Carlo" – "We invite our listeners in the British Isles to stay tuned for the following prgr's of Trans World Radio". F: "Ici Monte Carlo. Trans World Radio vous presente un programme en language Française". G: "Hier ist Monte Carlo, von Trans World Radio hören Sie ein Programm in deutscher Sprache" – **INT-SIG:** Musical Box.



V. by QSL-card. Recordings accepted.
PUB: Mw+Sw schedules available on request – **FI:** Dedicated excl. to broadc. Gospel of our Lord and Saviour Jesus Christ and is maintained by free will contributions.

NORWAY

L.T: GMT+1 h – **Pr.L:** Norwegian.
NORSK RIKSKRINGKASTING (Gov.)
A non-comm. enterprise operated by an indep. State organization.
ADDR: Bj. Bjørnsons Plass 1, Oslo. **Te:** 463820. **Cable:** Studio. **Telex:** Radio: 1023. Television: 1794. Foreign Relation Service: 6820.
L.P: Radio and Television: Dir. Gen: Dr. Hans Jacob Ustvedt. Dir. Adm: O. Granlund. Chief Secr: B. Kragem. Dir. Personnel: O. Svanevik. Editor "Programbladet": E. Strand. Head of Foreign Relation Service: K. C. Lyche. Press & Inf. Officer: O. Grythe – **Radio:** Dir. Prgr: T. Elster. Dir. Tec: E. Julsrud. Prgr. Editors: A. Klæbo, P. Øisang, H. Kiran, P. Riste, L. Rustad, H. Heiberg, K. Lange. Shortwave Dept: E. Thokle – **Television:** Dir. Prgr: O. Nes. Dir. Tec: T. Navelsaker. Prgr. Editors: J. Frydenlund, T. Berg, A. Okkenhaug, E. Diesen, A. Brinchmann, L. Johnson, O. Foss.

RADIO TRANSMITTERS
Long and Medium Waves:

	kc	m	kW
Tromsø	155	1934	10
Oslo	218	1376	200
Røros	520	577	0.25
Vigra	629	477	100
Bodø	674	445	10
Finmark	701	428	20
Bergen	890	337	20
Kristiansand	890	337	20
Trøndelag	890	337	20
Alta	1115	269	0.25
Arendal	1115	269	0.25
Bø i Vesterålen	1115	269	1
Lista	1115	269	0.25
Mo i Rana	1115	269	0.04
Namsos	1115	269	1
Notodden	1115	269	1
Stavanger	1313	228	100
Odda	1466	205	0.25
Geilo	1466	205	0.25
Kautokeino	1466	205	1
Narvik	1466	205	1
Porsgrunn	1466	205	0.25
Sandnessjøen	1466	205	0.25
Svalbard	1466	205	1
Brønnøysund	1484	202	0.25
Glomfjord	1484	202	0.25
Karasjok	1484	202	1
Mosjøen	1484	202	0.25
Rjukan	1484	202	0.25
Fredrikstad	1578	190	10
Nordkapp	1578	190	1.3

FM	Mc	kW/W
Alta	89.7	0.6
Berkåk	87.6	30W
Bergen	89.1	60
Berlevåg	95.8	30W
Bjerkreim	94.2	60
Bokn	93.5	100
Bremanger	93.6	15
Bromma	98.5	72W
Båtsfjord	98.7	20W
Dalekvam	96.9	35W
Fauske	97.6	1.3
Flatanger	99.5	23W
Flå	96.9	27W
Førde	92.8	15
Geilo	96.95	0.5
Geiranger	99.9	30W
Gjøra	93.6	35W
Gol	87.9	0.5
Greipstad	88.8	11
Grimo	98.4	1.1
Grong	91.9	15
Gulen	88.0	15
Hadsel	92.4	15
Hammerfest	96.6	30
Hasvik	90.1	3
Hattfjelldal	96.0	35W
Hellesylt	97.5	15W
Hemnes	88.5	15
Hestmannen	97.0	2
Hol	95.0	0.8
Hovdefjell	87.8	25
Høyanger	96.8	30W
Jetta	95.9	15
Kappfjell	95.5	0.6
Kistefjell	91.8	1.8
Kjeldeknatten	91.7	1.1
Kjøllefjord	94.9	27W
Kongsberg	91.3	60
Kyrkseterøra	99.9	27W
Lakselv	99.9	2.4
Lesja	93.5	3.1
Lillehammer	99.9	0.1
Lom	94.9	50W
Lyngdal	97.6	12
Lønahargi	93.3	60
Mehamn	96.1	38W
Meldal	96.1	40W
Melhus	92.4	60
Meråker	89.8	40W
Narvik	88.8	15
Nesflaten I	96.3	15W
Nordfjordeid	89.4	15
Nordheimsund	90.1	130W
Nordhue	87.6	60
Odda	90.0	18W
Oslo	88.65	100
Otta	94.0	50W
Ramsøy	95.9	2.1
Reinsfjell	89.1	30
Rennebu I	90.1	15W
Rjukan	95.0	25W
Røldal	91.0	30W
Sauda II	90.9	25W
Skafså	95.1	12W
Skien	93.7	25W
Sogndal	91.5	30
Steigen	90.3	15
Steinkjer	90.9	12
Stord	96.0	60
Storås II	99.9	15W
Stryn	87.6	750W
Sunndalsøra	96.8	50W
Svelgen II	87.6	18W
Svorkmo	96.0	10W
Tana	92.5	30
Todalen II	98.5	60W
Tonstad	89.8	14W
Trolltind	88.2	9

FM	Mc	kW/W	FM	Mc	kW/W
Tron	98.3	30	Veggen	93.4	20W
Trysil	95	20W	Velfjord	95.8	0.3
Tydal	89.0	60W	Vinstra	92.7	0.13
Valldal	98.5	0.15	Ålen I	96.2	15W
Valsøyfjord I	96.5	10W	Ålen II	91.4	15W
Varanger	91.8	30	Åndalsnes	96.0	0.15
Vega	89.3	25	Årdal	87.6	30W

Power Line Distribution: Langerak 300kc 0.6kW, Brokke 290kc 1kW, Oppdal 290kc 1kW, Røldal 285kc 1kW, Tonstad 290kc 2kW, Åndalsnes 300kc 0.25kW, Årøy 300kc 0.66kW, Sulitjelma 511kc 0.25kW.
HOME SCE: W 05.40–09.25, 10.20–13.30, 15.00–22.20. Sun 06.30–14.00, 15.00–22.20. N: 05.40(W), 07.00(W), 08.00(Sun), 12.10, 15.05, 17.35, 21.10 – **Wrp:** 05.40(W), 07.00(W), 08.00(Sun), 12.00, 17.30, 21.00 – **Folklore Music:** Sun 16.30 – **Rlg:** Sun 10.00. Thurs 17.00, W 07.15 – **L.L: English:** Wed 21.30, Thurs 09.00 (for beg.) **German:** Wed 16.35. **French:** Thurs 16.35.
Samisk from Tromsø (1935m) and Vadsø: Mon, Wed 13.50, Tues 13.25, Thurs, Sat 13.40. **Reg. Prgr's** (over all tr's): W 13.00–13.30.
ANN: "Dette er Norsk Rikskringkasting". In Samisk: "Dát læ Norga Riikarádio, Tromsas. Dii gullabettet Samigiel prográmma".
INT-SIG:

FOREIGN SERVICE
Tr's: Fredrikstad 120kW(2), 100kW(1), 10kW(2).
Freq's that may be used during the year:

Call	kc	m	Call	kc	m	Call	kc	m
LKF	1578	190.1	LKQ	11735	25.56	LKC	21655	13.86
LKJ	6130	48.94	LLK	11850	25.32	LLP	21670	13.85
LLI	6185	48.50	LKV	15170	19.78	LLQ	21730	13.81
LLR	7240	41.44	LLM	15175	19.77	LLL	25730	11.66
LLD	9550	31.41	LKU	15345	19.55	LLA	25900	11.58
LLG	9610	31.22	LKW	17755	16.90			
LLH	9645	31.10	LLN	17825	16.83			

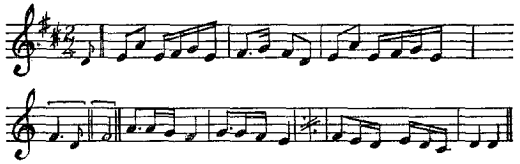
G.C: Fredrikstad 10.58E/59.11N; Tromsø 18.55E/69.41N.

Abbreviations: I=M. East/New Foundland/USA(West)/Ce. America; II=Pacific/F. East/NZ/Indonesia/We. Australia/Ea. Africa; III=F. East/Ea. Australia/NZ/So. America/We. & So. Africa/We. Europe; IV=M. East/India/Indonesia/We. Australia/USA(East) Ce. & So. America/We. Europe; V=We. Europe/New Foundland/USA/Ce. America; VI=Scandinavia/Pacific/Africa; VII=We. Europe/Africa VIII=No. Africa/New Foundland/So. America; IX=We. & So/Africa/So. America/New Foundland.

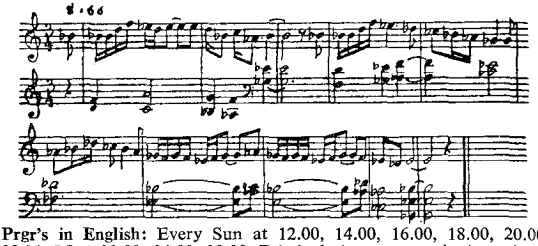
Beams: a) 290/330° – b) 5/45/95/150° – c) 45/95/185° – d) 95/185/225/275° – e) 150/225/275/330° – f) 150/185/225° – g) 5/185/225/275° – h) 225/290/330°. Freq's in fat types refer to tr's of 100/120kW. The other are 10kW tr's; * non-directional.

Times	Beam	Area	kc
03.00–04.30	a	I	**9550/9610/11850**
07.00–08.30	b	II	**9610/11850/17825**/21655/25900
11.00–12.30	c	III	**9610*/11850/21730**/25730/25900
13.00–14.30	d	IV	***17825**/21655/21730/25730/25900*
15.00–16.30	e	V	**15175/17825**/21655/21730/**25730**
17.00–18.30	f	VI	**11850/15175/17825**/21655/21730
19.00–20.30	g	VII	**9610/11850/15175**/21655/21730
21.00–22.30	h	VIII	**9610/11735/11850**
23.00–00.30	h	IX	**9550/9610/11850**

Tromsö sw-tr (10kW) carries the Home Sce. prgr's on 6130kc (beam 280°).
N. in Norwegian at the beginning of each tr. **N. in English:** Sun 12.00, 14.00, 16.00, 18.00, 20.00, 22.00. Mon 00.00, 04.00 08.00.
Prgr's in Spanish: Every Fri/Sat at approx 12.20, 14.20, 16.20, 18.20, 20.20, 22.20, 00.20, 04.20, 08.20 mainly intended for Spanish seamen onboard Norw. ships.
Prgr. for Norwegians abroad: Sun: Rel. Sce, Sport, L.N. – Mon: Sport N, Parliament N – Tues: Topicalities L.N. – Wed: Request Prgr. (music), L.N. – Thurs: World N, L.N. – Fri: Missionary, Shipping N, L.N. – Sat: Request prgr, L.N.
ANN: "This is the overseas service & Radio Norway".
INT-SIG: Every s.w. transmission is introduced by the following theme, which originates from an ancient folk tune from Hallingdal.



Five minutes previous to every s.w. tr. the following signal is sent:



Prgr's in English: Every Sun at 12.00, 14.00, 16.00, 18.00, 20.00, 22.00, Mon 00.00, 04.00, 08.00. Tr's include news, music, interviews, and feature prgr's. We are grateful for comments on our transmission. Reports are answered by QSL-card. Return postage is not necessary. Our postal address is: **Radio Norway**, Oslo, Norway.
PUB: Programbladet (weekly), Prgr.schedule free on request.

TELEVISION TRANSMITTERS

STATIONS:	ch	kW(ERP)	STATIONS:	ch	kW(ERP)
Greipstad	2	15	Reinsfjell	6	60
Gulen	2	8	Hovdefjell	7	30
Melhus	2	100	Salten	7	12
Steigen	2	12	Sogndal	7	20
Gamlemsveten	3	30	Bokn	8	100
Hemnes	3	12	Bergen	9	140
Bremanger	4	30	Lyngdal	9	15
Kongsberg	4	100	Tron	9	30
Grong	5	20	Lillehammer	10	1
Nordhue	5	60	Lønahargi	11	10
Oslo	6	100	Fister	11	1.5

+90 low power st's less 0.5kw not mentioned.
D.Prgr: W 07.30–15.00(exc. Tues). Prgr's: Mon-Fri 19.00–21.00, Sat/Sun 18.00–22.00.

NOREA RADIO *(Nordic Radio Evangelistic Association)*
ADDR: Grensen 19 Oslo 1. **Te:** 417640. **Cable:** Norskluth – **L.P:** Dir. Adm. & Prgr: Å. Nevland. Dir. Tec: S. Spikkeland – **D.PRGR:** Norwegian 10.30–11.00 on 11845kc, 17.00–17.30 on 7260 or 9620 kc (100kW) over R. Monte Carlo – **V.** by QSL-card or letter – **FI:** By gifts from listeners & friends.

UKE-SENDEREN
is operated by Students of the Technical University of Trondheim all odd-numbered years, and by students of the University of Oslo all even-numbered years.
L.P: different persons each years.
STATIONS: Depend on issuing authorities (Telegrafstyret) –
D.PRGR'S: Depend on issuing authorities (NRK).

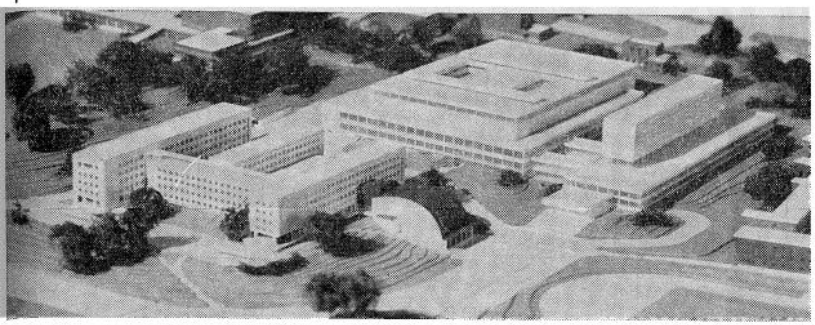
POLAND (People's Rep. of)

L.T: GMT+1 h – **Pr.L:** Polish.

POLSKIE RADIO I TELEWIZJA (Gov.)
ADDR: Komitet do Spraw Radio i Telewizji "Polskie Radio i Telewizja" ul. Noakowskiego 20, Warsaw. **Te:** 2106. **Cable:** "Polskieradio".
L.P: Pres: W. Sokorski. Vice Pres, Home Sce: H. Werner. Vice Pres, Foreign Sce: E. Uzdanski. Vice Pres, Engineering: K. Kozlowski. Dir. Prgr: Home Sce: S. Stampfl. Dir. Prgr. Foreign Sce: H. Meller. Vice Pres. for TV: St. Stefanski. Dir. Adm: A. Landau. Secr. Gen: H. Cendrowski. Dir. Music: R. Jasinski. Dir. Tec: B. Klimaszewski. Head Intern. Relations Office: Dr. S. Mikulicz.

HOME SCE:	kc	m	kW		kc	m	kW
Warszawa I	227	1322	500	Lublin	1367	219.8	60
Poznan	737	407	300	Lódz	1484	202.2	8
Warszawa II	818	367	300	Kielce	1484	202.2	2
Katowice	1079	278	60	Olsztyn	1484	202.2	1
Krakow	1205	249	60	Zakopane	1484	202.2	2
Rzeszow	1205	249	60	Szczecinek	1484	202.2	2
Wroclaw	1259	238.5	50	Slupsk	1484	202.2	2
Zielona Gora	1259	238.5	30	Jelenia Góra	1484	202.2	1
Gdansk	1304	230	60	Opole	1594	188.2	1
Szczecin	1304	230	160	Koszalin	1594	188.2	1
Bialystok	1367	219.8	60	Gizycko	1594	188.2	1
Lódz II	1367	219.8	60				

FM: Name	Mc	kW	Prgr	FM: Name	Mc	kW	Prgr
Bydgoszcz	71.0	5	I+III	Kielce	71.9	5	II
	68.9	5	II	Kraków	68.7	5	I
Gdansk	70.3	5	I+III		66.1	5	II
	67.0	5	II	Lublin	72.4	5	I+III
Katowice	89.8	3	I+III		69.0	5	II
	69.5	5	I+III	Olsztyn	69.5	5	II
	68.3	5	II	Opole	95.0	3	I+III
Kielce	70.4	5	I+III		66.7	5	II



Model of the existing Broadcasting House in Oslo (in the foreground) and the new Television House, now under construction (in the background)

NORSK RIKSKRINGKASTING

(THE NORWEGIAN BROADCASTING CORPORATION)

FM: Name	Mc	kW	Prgr
Poznan	69.7	5	I+III
	66.6	5	II
Rzeszów	68.2	5	I
	65.9	5	II
Warszawa	97.6	9	I+III
	69.2	5	I+III
	67.9	2	II
Ziel. Góra	69.1	5	I+III
	72.5	5	II
Zgorzelec	68.2	0.3	II
Wroclaw	70.6	5	I+III
	72.8	5	II
Szczecin	68.8	5	I+III
Koszalin	69.9	5	II

Prgr. I: W 03.57–02.00. Sun 04.30–02.00.
N: 04.00(W), 05.00, 06.00, 07.00, 08.00(Sun), 11.04, 14.00, 16.00, 19.00, 22.00 – **Folk Music:** W 11.45–12.00 – **Chopin Concert:** Wed 20.00–20.30 – **The Polish Radio Symphony Orchestra (WOSPR) Concert:** Mon 20.00–22.00 – **L.L: English:** Mon, Thurs 17.30. **French:** Wed, Sat 17.30. **Russian:** Tues, Fri 17.30.
Prgr. II: On 818kc and all mw st's: W 03.57–23.00. Sun 05.00–23.00. **N:** 04.30(W), 05.30, 06.30, 07.30, 11.04, 15.00(W), 16.00(Sun), 20.00, 22.50 – **Chopin Concert:** Sun 15.30–16.00 – **National Philharmonic Concerts:** Fri 18.30 – **Symphonic Concert:** Sun 11.10 – **L.L: English:** Tues, Fri 08.45. **French:** Thurs, Sun 08.45. **Russian:** Wed, Sat 08.45.
Prgr. III: D 18.00–23.00.

FOREIGN SERVICE: 737kc 300kW, 818kc 300kW, 1259kc 50kW 1367kc 60kW, 1502kc 300kW – **Shortwaves:** 5/7.5/15/100kW (G.C: 20.52E/52.04N).

kc	m	kc	m	kc	m	kc	m
737	407.1	5950	50.42	7145	41.99	9675	31.01
818	366.7	5995	50.04	7285	41.18	11840	25.34
1259	238.5	6135	48.90	9525	31.50	11955	25.09
1367	219.8	7125	42.11	9540	31.45	15275	19.64
1502	199.7						

October 66–April 67

TO EUROPE

Danish kc
12.00–12.30 1502
16.30–17.00 6135, 7145
20.30–21.00 1502, 6135, 7145, 9540
English
18.30–19.00 6135, 7145
19.30–20.00 1502, 6135, 7145, 9540
20.30–21.00 5950, 7125
21.30–21.55 6135, 7145
22.30–23.00 5950, 9540, 1502
23.03–23.30 818

Esperanto kc
15.30–16.00 5950, 6135, 7125, 7145, 7285, 9675
Finnish
16.00–16.30 6135, 7145
19.00–19.30 6135, 7145
French
11.00–11.15 5995, 9675, 11800, 11955
16.30–17.00 7285, 9675
17.30–18.00 1502, 7285, 9540, 9675

French kc
20.00–20.30 5950, 7125
21.30–22.00 5950, 7125
22.00–22.30 1502, 5950, 9540
German
11.30–12.00 1502, 6135, 7125, 7145
17.00–17.30 } 1502, 5950, 7125,
18.30–19.00 } 9540
19.30–20.00 5950, 7125
21.00–21.30 5950, 7125
Italian
11.15–11.45 5995, 9675, 11800, 11955
17.00–17.30 6135, 7145
18.00–18.30 1502, 7285, 9540, 9675
20.00–20.30 7285, 9675
21.00–21.30 1502, 6135, 7145, 7285, 9540, 9675
Polish
06.00–06.30 1502, 6135, 7125, 7145, 9525, 9675
06.30–07.00 6135, 7125, 9525, 9675
12.30–13.30 5995, 9675, 11800
15.00–15.30 5950, 6135, 7125, 7145, 7285, 9675
16.00–16.30 5950, 7125
16.30–17.00 1502, 5950, 7125, 9540
17.30–18.30 }
18.00–18.30 } 5950, 7125
19.00–19.30 }
20.00–20.30 1502, 9540
23.03–23.30 737, 1259, 1367
23.30–24.00 737, 818, 1259, 1367
Spanish
17.00–17.30 7285, 9675
20.30–20.57 7285, 9675
23.00–23.30 1502, 5950, 7145

Swedish kc
11.00–11.30 1502, 6135, 7125, 7145
17.30–18.00 6135, 7145
20.00–20.30 6135, 7145
21.30–22.00 1502, 9540
Concerts
06.30–07.00 1502, 7145
12.30–14.00 1502, 9525
15.00–16.30 1502, 9540
19.00–19.30 1502, 9540
23.30–01.00 1502, 5950, 7145

TO AUSTRALIA/NZ

English kc
07.30–08.00 9675, 11840, 15275
08.30–09.00 9675, 11840, 15275
Polish
07.00–07.30 9675, 11840, 15275
08.00–08.30 9675, 11840, 15275

TO AFRICA

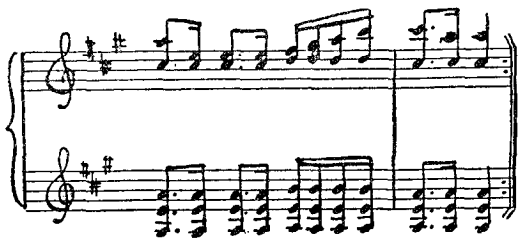
English kc
12.00–12.30 7145, 11840, 15275
13.00–13.30 7145, 11840, 15275
19.00–19.30 7285, 9675
22.00–22.30 7125, 7145, 7285, 9675, 11840
French
12.30–13.00 7145, 11840, 15275
13.30–14.00 7145, 11840, 15275
18.30–19.00 7285, 9675
22.30–23.00 7125, 7145, 7285, 9675, 11840

TO SOUTH AMERICA

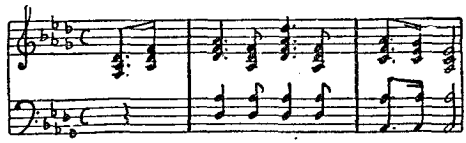
Polish kc
23.00–23.30 7125, 9675, 11840
23.30–24.00 7125, 9675, 11840
00.30–01.00 7125, 9675, 11840
01.00–01.30 7125, 9675, 11840
Spanish
00.00–00.30 7125, 9675, 11840
01.30–01.55 7125, 9675, 11840

DX-PRGR: English: 2nd Fri of the month 18.30 and following Mon 21.30. **Swedish:** Thurs 17.30, 21.30. **Danish:** Wed 16.30, 19.30 (fortnightly).

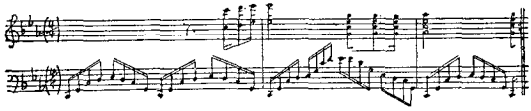
ANN: Home Sce: "This is Polskie Radio Warsaw" (or another station when local programme) – "Tu Polskie Radio Warszawa" – **Foreign Sce: E:** "This is Warsaw calling" – **Polish:** "Mówi Warszawa" – **F:** "Ici Varsovie etc" – **G:** "Hier spricht Warszawa" – **Sp:** "Habla Radio Varsovia" – **I:** "Qui Radio Varsavia" – **Danish:** "Her er Warszawa" – **Swedish:** "Här är Polens Radio Warszawa".
INT-SIG: Home Sce: Warsaw National, Warsaw I:



Warsaw II: First movement of Polonaise in A flat major by Chopin.

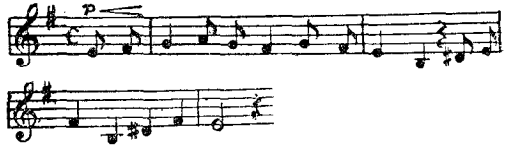


Foreign Sce: Revolutionary Etude by Chopin. – **V.** by QSL-card.



V. by QSL-card and letter. Re. to Polskie Radio, Al Niepodleglosci 75/77, Warsaw – **PUB:** "Radio i Telewizja" (weekly), Polish Radio and Television Bulletin (monthly) – **FI:** By licence payments – **AD:** 7% of broadc. time – **ALF:** 180,- Zlotys'.

POLISH PATHFINDERS STATION (Operated by the Polish Pathfinders Union) – **ADDR:** Konopnickiej 6, Warsaw – **L.P:** Gen. Dir: M. Kasprzyk. Dir. Tec: J. Sieluzycki.
HOME SCE. in Polish: D 11.00–17.00(exc. Mon) on 6850kc 43.80m 0.35kW, 7306kc 41.06m 0.35kW.
ANN: "Mówi Rozgłośnia Harcerska" (Polish Pathfinders Station speaking) – **INT-SIG:**



V. by letter. Rp – **F.PL:** Power to 1kW.

PORTUGAL

L.T: GMT (GMT+1 h from 1st. Sun in April to 1st. Sun in October) – **Pr.L:** Portuguese.

EMISSORA NACIONAL DE RADIODIFUSÃO (Gov.)

ADDR: Central Sce: Rua do Quelhas 2, Lisboa. **Cable:** "Emissora-Lisboa". **Te:** 660181 PBX – **Reg. Sce's:** Emissor Reg. do Norte: Rua Cândido dos Reis, Porto – Emissor Reg. de Coimbra, Rua Ocidental a Montarroio, Coimbra – Emissor Reg. do Sul, Faro – Emissor Reg. dos Açores, Ponta Delgada, Açores – **L.P:** Dir. Gen. Dr. S. Allegro. Dir. Tec: Eng. M. Bivar. Dir. Adm: Dr. C. Rogeiro Dir. Prgr: Eng. J. da Silva Dias. Head, Intern. & Cultural Exchange Dept: Dra. M. P. de Barros Santos.

HOME SERVICE

NETWORK I: 07.00–01.00(Sat 02.00).
Medium Waves:

	kc	m	kW		kc	m	kW
Lisboa I	665	451	135	Elvas	1331	225	0.1
Faro	557	539	1	Viseu	1358	221	1
Guarda	557	539	1	Porto	1367	219	10
Norte I	719	417	25	Coimbra	1448	207	1
Portalegre	1196	251	0.1	Covilhã	1562	192	1

Short Waves (to Atlantic) – (G.C: 08.40W/38.45N):
Lisboa: 11925 kc 25.16m 10kW: 09.00–21.00 – 6025kc 49.79m 10kW: 21.20–01.00 – Ponta Delgada (Azores): 4865kc 61.66m 1kW: 14.00–15.00, 20.00–24.00.

FM:	Mc	kW		Mc	kW		Mc	kW
Lisboa I	95.7	12	Monchique	88.9	2.5	Porto II	92.5	22
Porto I	96.7	22	Guarda I	94.7	0.5	Lousã II	89.3	22
Lousã I	87.9	40	Lisboa II	94.3	12	Monchique II	91.5	2.5

NEWS: 07.05, 08.00, 09.00, 11.00, 12.00, 13.00, 15.00, 16.30, 18.00, 19.00, 20.30, 22.30, 24.00, 00.50.

NETWORK II: 08.00–17.00 (Sun 09.25), 18.00 (Sun 12.00)–22.00. Lisboa II 755kc 397m 135kW – Norte II 1061kc 283m 25kW+FM st's II.

NETWORK III: 22.00–01.00 on the FM tr's of the 2nd Netw. – **N:** 00.50.
NEWS: 12.00, 20.00 – **ANN:** "Emissora Nacional, a transmitir com... (regional tr's)".

OVERSEAS SERVICE

Short Waves: 7×100kW, 1×50kW, 1×10kW. (G.C: 08.40W/38.45N). All st's located at S. Gabriel – studios in Lisboa. All tr's directional. Call: CSA—.

kc	m	kc	m	kc	m	kc	m
5985	50.13	7225	41.52	11840	25.34	17895	16.76
6025	49.79	9635	31.14	15125	19.83	21495	13.96
6185	48.50	9670	31.02	17880	16.78	21700	13.83
7130	42.08						

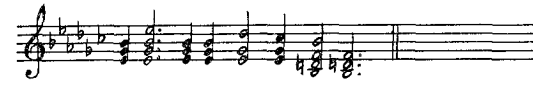
Remark: Powers indicated are the power at carrier level.

PORTUGUESE SCE:
Areas: I) Timor; II) Macau; III) Goa (Port. India); IV) S. Tomé/Angola/Mozambique; V) Guinea/Cape Verde/Brasil.

H of tr.	Area	Nov-Apr (kc)	N
04.45–07.00	IV	7130/11840	05.00, 06.45
09.15–13.30	I/II	15125/21495	09.30, 10.30, 12.00, 13.15
09.15–13.30*	IV	17835/21700	09.30, 10.30, 12.00, 13.15
13.45–17.00***	V	15125/21700	14.00, 16.45
15.00–17.00***	III	17895/21495	15.30, 16.30
15.15–21.15**	IV	11840/15125	17.30, 18.30, 20.00

* Sun 09.15–17.15, ** Sun 13.45–21.45, *** exc. Sun.

ANN: "Aqui Lisboa, Serviço Ultramarino da Emissora Nacional" – **INT-SIG:** T.S. and National Anthem.



V. by QSL-card. Recordings accepted – **PUB:** "Rádio e Televisão".

INTERNATIONAL SERVICE ("The Voice of the West")
ADDR: Radio Portugal, Rua S. Marçal 1-A, Lisboa.
Areas: V=Europe; VI=Australia/NZ; VII=Japan/Far East; VIII=So. Ea. Asia; IX=Africa; X=So. America; XI=No. America; XII=Canada; XIII=Brazil; XIV=USA/Canada/Portuguese Fishing Fleet.
Medium Waves:

H of tr.	L.	Area	kc	N
22.00–22.45	French	Europe	755, 1061	22.00
22.45–23.30	English	Europe	755, 1061	22.45
23.30–00.15	German	Europe	755, 1061	23.30

Short Waves

English	Area	kc	German	Area	kc
07.30–08.15	VI	11840/17880	21.45–22.30	V	6025/7130
08.15–09.00	VII	11840/17880	**Italian**		
13.45–14.30	VIII	17895/21495	21.00–21.45	V	6025/7130
14.30–15.00(W)	VIII	17895/21495	**Konkani**		
18.15–19.00	IX	17880/21495	14.30–15.15(W)	VIII	17895/21495
20.15–21.00	V	6025/7130	**Portuguese**		
02.00–02.45*	XI	6025/6185	21.30–00.50	XIII	9670/11840
03.00–03.45	XI	5985	00.00–01.45	XIV	6025/6185
04.00–04.45**	XI	6025/6185	02.45–03.30	XIV	6025/6185
French			04.45–07.00	V	6185/7225
17.30–18.15	IX	17880/21495	(Sun 08.30)		
19.30–20.15	V	6025/7130	**Spanish**		
02.15–03.00	XII	5985	01.00–01.45	X	9635/11840

NEWS: English: 07.30, 08.15, 14.15, 14.30(W), 18.15, 20.40, 02.00, 03.00, 04.00. **French:** 17.30, 19.30, 02.15. **German:** 21.45. **Italian:** 21.00. **Konkani:** 14.45. **Portuguese:** 22.00, 23.30, 00.15, 03.00, 05.00, 06.45. **Spanish:** 01.00.
DX-Prgr (in English) Every 2nd & 4th Fri/Sat: 07.45, 08.30, 14.00, 18.30, 20.30, 02.15, 03.15, 04.00.
ANN: E: "This is R. Portugal speaking to you from Lisbon". F: "Ici R. Portugal qui vous parle de Lisbonne". **Sp:** "Esta es R. Portugal que habla desde Lisboa. I: "Qui R. Portogallo che vi parla da Lisbona" **G:** "Hier spricht R. Portugal aus Lissabon". Konkanin: "Lisboa xarantlo Radio".

ic

INT-SIG: Signature tune of foreign language broadc. is the opening bars of the Fifth Symphony by Beethoven. Closes with National Anthem – V. by special QSL-card. Recordings accepted – PUB: R. Portugal Listeners Magazine, quarterly (in each language) free of charge – ALF: Esc. 100,–.

R. UNIVERSIDADE (Gov. – Ministry of Nat. Education)
ADDR: R. D. Estefania 14, Lisboa 1. Te: 41884 – L.P: Dir: Dr.. A. R Gonçalves Pereira. Operations Coordinator: A. Prates Nunes. Tec. Asst: V. Felix.
HOME SCE: Cultural and informative prgrs. mainly: W 17.00–17.55, Sun 09.30–11.55 on 755kc (Lisboa II).
ANN: "R. Universidade, estudios do Centro Universitário de Lisboa da Mocidade Portuguesa, a transmitir por intermédio da estação Lisboa II da Emissora Nacional" – INT-SIG: Opens with "Gaudeamus Igitur" and closes with the "Marcha da Mocidade Portuguesa" – V. by QSL-card. Recordings accepted – F.PL: FM tr's in Lisboa. Coimbra. Porto – PUB: monthly bulletin free.

RADIO RENASCENCA (Rlg, Catholic)
ADDR: Emissora Catolica Portuguesa, Rue Capelo 5,2°, Lisboa.
STATIONS: Lisboa CSB3 1286kc 233.3m 2.5kW – CSB52 6155kc 48.74m 3kW (G.C: 09.12W/38.45) – Porto CSB30 1169kc 256.6m 10kW.
FM: Lisboa 93.2Mc 18kW – Porto 93.7Mc 5kW – Lousa 91.7Mc 25kW – Muro 90.4Mc 12kW – Monchique 98.6Mc 6kW – Bornes 89.6Mc 5kW – Marofa 94.2Mc 6kW – Gardunha 99.5Mc 1kW.
HOME SCE: 07.00–02.00 – N: 08.25, 12.45, 20.30.
ANN: "R. Renascenca – Emissora Catolica Portuguesa" – INT-SIG: Gong. Prgr's open with a religious choir – V. by QSL-card.

RÁDIO CLUBE PORTUGUÊS (Comm.)
(Sociedade Anónima Cooperativa de Responsabilidade Lda.)
ADDR: Central Office: Rua Sampaio e Pina 26, Lisboa 1. Cable: Radioclube. Te: 682071. Telex: 596 – No. Branch: Delegação do Norte, Rua de Ceuta 53, Porto. Te: 23863. Telex: 742 – L.P: Gen Mgr: A. Lima Basto. Comm. Dir: J. Botelho Moniz. Dir. Prgr: A. Jorge. Dir. Tec: M. Menezes. Dir. Insp: A. Moita de Deus. No. Branch: H. Schreck.

STATIONS:		kc	m	kW	h of tr.
Miramar	CSB9	782	383.6	100	07.00–02.00
Lisboa	CSB2	1034	290.1	50	24 h
Lisboa	CSB51	6080	49.34	10	24 h

FM Network: Lisboa 97.4Mc, Foia 88.1Mc, Lousã 90.8Mc, Portalegre 98.9Mc, Mendro 92.0Mc: 07.00–01.00. N: 00.00, 01.00, 03.00, 05.00, 06.00, 07.00, 08.00, 09.00, 11.00, 13.00, 15.00, 17.00, 19.00, 20.00, 21.00, 22.00, 23.00. ANN: "R. Clube Português" – INT-SIG: Gong – V. by QSL-card. Recordings accepted – AD: 15% of broadc. time.

EMISSORES ASSOCIADOS DE LISBOA (Comm)
ADDR: Rua de Campolide 27, 6°D°, Lisboa 1. Te: 683450. Studios: R. Voz de Lisboa: Av. Infante Santo 53, Lisboa 3. Clube Radiofónico de Portugal: R. Carlos Mardel 5, Lisboa 1. R. Graça: R. Verónica 126, Lisboa 2. R. Peninsular: R. Fialho Almeida 3, Lisboa 1 – L.P: Consulting Eng: C. Barradas da Silva. Tec. Dir: A. Laranjeira. Dir. Adm: A. Santos. Public Rel: C. Flor.
STATIONS: CSB4 1594kc 188m 10kW – FM: CSB266 99.4Mc 1kW.
HOME SCE: D 07.00–02.00. N: 12.20, 20.30 – ANN: "CSB4, Estação de Emissoras Associados de Lisboa" – INT-SIG: String chords (guitar) – V. by QSL-card. – FI: Priv. (4 partners – AD: 15 % broadc. time.

EMISSORES DO NORTE REUNIDOS (Comm.)
ADDR: R. D. João IV 960, Porto. Te: 30781.
STATIONS: CSB5 1578kc 190.7m 10kW – FM: CSB84 91.31Mc kW.
HOME SCE: 07.00–05.00. N: 13.00, 23.45 – ANN: "Aqui Porto Emissores do Norte Reunidos a transmitir..." – V. by QSL-card or letter. Recordings accepted.

EMISSORA DO LICEU DE PEDRO NUNES (Educational)
ADDR: Ministerio da Educação Nacional, Av. Pedro Alvares, Lisboa.
L.P: Pres: Dr. J. M. Labo – STATION: 6003kc 49.98m 0.075kW.
D.PRGR: W 17.00–18.30.

RADIO RIBATEJO (Comm.)
ADDR: Av. 5 de Outubro, 34, Santarém. Te: 363 – L.P: Dir. Gen: J. Varela Santos. Dir. Tec: A. V. Santos.
STATION: 1322kc 226.9m 0.5kW.
HOME SCE: 10.00–14.00, 18.00–20.00 (Sun 08.00–20.00).
N: 11.45, 13.45, 19.30 – INT-SIG: Gong – V. by QSL-card. Recordings accepted. Re. in P, Sp, F, E.

R. ALTO DOURO (Priv.)
ADDR: Rua Ribeira Grande 181, Porto – L.P: St.Mgr: M. Dias de Oliveira – STATION: 800kc – HOME SCE: 12.00–14.00.

RUMANIA (Socialist Rep.)

L.T: GMT+2 h – Pr.L: Romanian.

RADIODIFUZIUNEA SI TELEVIZIUNEA ROMANA (Gov.)
ADDR: P.O.B. 111, Bucuresti. **Te**: 134610. **Cable**: Radioteleviziunea. **Telex**: 251, 252 – **L.P**: Pres: V. Cazacu. Vice Pres: G. Ionescu, I. Grigorescu, B. Ionita, O. Paler, M. Manea. Head Foreign Relations: D. Natu.

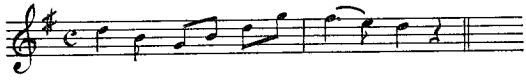
STATIONS:

Name	kc	m	kW	Name	kc	m	kW
Brasov	155	1935	600	Constanta	1315	228.1	2
Bucuresti	555	540.5	5	Oradea	1428	210.1	6
Timisoara II	628	477.7	30	Craiova	1456	206.0	20
Timisoara I	755	397.3	135	Brasov	1484	202.2	2
Bucuresti I	854	351.3	150	Baia Mare	1484	202.2	2
Miercurea	909	330.0	7	Resita	1484	202.2	2
Bacau	1052	285.3	50	Sibiu	1484	202.2	2
Cluj	1149	261.1	50	Tg. Mures	1484	202.2	2

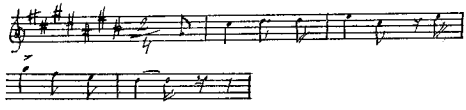
HOME SERVICE: 1st Prgr: W: 03.00–22.00 on 155/1315/1484kc+FM; 03.00–05.30 on 854/1428/1456kc—FM; 03.00–04.00 & 04.30–05.30 on 755kc (Mon 03.00–05.00); 03.00–04.00 on 1052kc; 05.00–05.30 on 909/1149kc; 05.30(Mon 05.00)–22.00 on 555kc; 05.30–13.00 on 628kc. **Sun**: 04.00–22.00 on 155/555/1315/1484kc+FM; 04.00–18.00 on 628kc.
N: 03.00(W), 04.00(exc. Mon), 05.00, 08.00(W), 09.00(Sun), 10.00(W), 11.00(Sun), 12.00(W), 14.00(W), 16.00(W), 18.00(Sun), 20.00, 21.52. **Wrp**: 10.00(W), 11.00(Sun), 14.00(W), 20.00 – **Wrp.+suggestions for drivers (motorists)**: 04.00(W), 05.00(Sun), 12.00(W).
2nd Prgr: W: 05.30–23.00 on 854kc; 05.30–11.00, 11.30–15.30, 17.30–23.00 on 1052kc; 05.30–15.30, 17.30–23.00 on 1456kc; 05.45–13.00on 755/1428kc; 14.00–14.30 on 755kc; 05.45–12.30 on 909/1149/1484kc; 17.30–23.00 on 909/1149kc; 13.30(Thurs–Sat 05.45)–23.00 on 628/1484kc; 13.30–14.30, 15.00–23.00 on 1428kc. Close down on Sat: 24.00. **Sun**: 04.00–23.00 on 854kc; 04.00–06.00, 06.30–23.00 on 1456kc; 04.00–05.00, 07.40–08.00, 09.00–14.30, 15.15–23.00 on 909/1149kc; 04.00–08.00, 09.00–14.30, 15.15–17.00, 18.00–23.00 on 1484kc; 04.00–08.00, 09.00–14.30, 15.15–23.00 on 1428kc; 05.30–06.00, 06.30–15.30, 18.00–23.00 on 1052kc, 06.00–08.00, 09.00–14.30, 15.15–17.00 on 755kc; 18.00–23.00 on 628kc – N: W 05.30, 07.00, 09.00, 11.00, 13.00, 15.00, 17.00, 19.00(Tues, Fri, Sat), 21.00, 22.52, 23.52(Sat only). Sun 04.30, 05.30, 08.30, 12.00, 17.00, 19.00, 21.00, 22.52 – **Wrp**: 09.00(W), 12.00(Sun), 15.00(W) – **Wrp+suggestions for drivers (motorists)**: 05.30(D), 13.00(W).
3rd Prgr: 16.00(Sun 14.00)–21.00 on 72.74/72.08Mc. N: 14.00(Sun), 16.00(W), 17.30(Sun), 19.30.

Regional Services:
R. Bucharest on 755/909/1149/1428/1484kc+FM 68.36Mc: Hungarian: W 05.30–05.45(N), 13.00–13.10(N), 14.55–15.00(N), Sun 08.00–08.20. German: W 13.10–13.30, 14.30–14.55; Sun 08.20–09.00 (08.40–09.00 for children). **Ann**: G: "Hier ist Bukarest". Hung: "Itt Bukarest".
R. Timisoara on 755kc: Serbian: Tues–Sat 04.00–04.30.
R. Cluj on 909/1149kc: Hungarian: W 05.30–05.45, 13.00–13.10, 14.55–15.00. Sun 08.20–08.40, 08.40–09.00 (for children). **Ann**: Hung: "Itt Kolozsvár". Rum: "Aici Cluj".
R. Tg. Mures on 909/1149kc: Hungarian: W 05.30–05.45, 13.00–13.10, 14.55–15.00. Sun 08.00–08.20. German: W 13.10–13.30, 14.30–14.55. Sun 07.00–07.30, 15.30–18.00. **Ann**: Rum: "Aici Tirgu Mures". Hung: "Itt Márosvásárhely".
R.Iasi on 1052kc: W 04.00–05.30, 11.00–11.30, 15.30–17.30. Sun 07.00–07.30, 15.30–18.00 – **R. Craiova** on 1456kc: W 15.30–17.00. Sun 06.00–06.30.
ANN: Opening: 1st Prgr: "Aici Bucuresti. Dragi Ascultători, bună dimineata. Transmitem programul nostru pe statiile de radio cu lungimile de undă..." – 2nd Prgr: "Aici Bucuresti. Transmitem programul II pe statiile de radio cu lungimile de undă de..." Close down: 1st Prgr: "Aici Bucuresti. Emisiunea programului I s-a terminat. Ascultati-ne din nou miine dimineată la ora 5 pe statiile de radio cu lungimile de undă de... Dragi ascultători, noapte buna." – 2nd Prgr: "Aici Bucuresti. Emisiunea programul II s-a terminat. Ne vom intilni din nou cu ascultătorii nostri la ora 5".

INT-SIG: Home Sce. 1st. Prgr:



Home Sce. 2nd Prgr:



FOREIGN SERVICE
Stations: 155kc, 150kW, 755kc 130kW, other 120kW (G.C: 26.06E/44.25N).

kc	m	kc	m	kc	m	kc	m
155	1935	6190	48.47	9570	31.55	11940	25.13
755	397.3	7195	41.70	9590	31.38	15250	19.67
5990	50.08	7225	41.52	11810	25.40	15380	19.50
6150	48.78	9510	31.55	11885	25.24		

Schedule: Oct. 66–April 67

TO EUROPE

English	kc
19.30–20.30	5990, 7225, 9510
22.30–23.00	155, 6190, 7195
French	
11.30–12.00	11940, 15250
18.30–19.00	5990, 6190, 7195, 7225, 9510
20.30–21.00	5990, 7225, 9510
21.30–22.00	5990, 7225, 9510
German	
19.30–20.00	6190, 7195
21.00–22.00	755
22.00–22.30	155, 6190, 7195
Greek	
12.00–12.30	7195, 9570
18.00–18.30	755
20.30–21.00	755
Italian	
12.30–13.00	9570, 11940
19.30–20.30	755
22.00–22.30	755
Portuguese	
21.00–21.30	5990, 7195, 9510, 9590, 11885
Rumanian	
20.00–20.30	6190, 7195
22.00–22.30	5990, 7225, 9510
22.30–23.00	755
Serbian	
17.00–17.30	755
19.00–19.30	755
Spanish	
19.00–19.30	7195, 9590
20.30–21.00	6190, 7195
21.30–22.00	6190, 7195

TO ASIA

English	kc
15.00–15.30	15250
Persian	
15.30–16.00	7195, 7225, 9510, 9570, 11885
17.00–17.30	7195, 7225, 9510, 9570, 9590

TO AFRICA

Arabic	kc
16.00–16.30	11940, 15380
18.00–18.30	7225, 9570
19.00–19.30	7225, 9510, 9570
English	
15.00–15.30	11810, 11885, 15380
French	
11.30–12.00	11810, 15380
17.30–18.00	9510, 11810, 11885, 15250

TO NEAR EAST

Arabic	kc
16.00–16.30	9510, 9570, 11885
18.00–18.30	6190, 7195, 9510
Turkish	
16.30–17.00	5990, 6190, 7195, 7225, 9510
17.30–18.00	755

TO NORTH AMERICA

English	kc
01.30–02.30	6150, 6190, 9510, 9590, 11885, 11940
03.00–03.30 / 04.30–05.00	6150, 6190, 9510, 9570, 9590, 11885, 11940
Rumanian	
23.15–24.00	6190. 9510
03.30–04.00	6190, 9570, 11885
Yiddish	
02.30–03.00	6190, 9510, 9590

TO SOUTH AMERICA

Rumanian	kc
23.15–24.00	9590
03.30–04.00	6150, 9510, 9590, 11940
Yiddish	
02.30–03.00	6150, 11885, 11940

TO LATIN AMERICA

Portuguese	kc
22.30–23.00	9510, 9570, 11885
01.00–01.30	6150, 6190, 9510, 9590, 11885, 11940
Spanish	
00.00–01.00	6150, 6190, 9510, 9590, 11885, 11940
04.00–04.30	6150, 6190, 9510, 9570, 9590, 11885, 11940

ANN: E: "This is Bucharest calling ... in the ... meter bands, that is ... kc, with today's first (second, third) broadcast in English". F: "Ici Bucarest. C'est Bucarest qui vous parle sur ... Bonjour chères auditrices, bonjour chers auditeurs. Veuillez écouter cette émission en langue française, au cours de laquelle nous diffuserons ... En espérant que cette émission vous est bien parvenue, nous vous disons: Au revoir chères auditrices, au revoir chers auditeurs." I: "Parla Bucarest. E Bucarest che vie parla nella sua prima (seconda, terza) trasmissione della giornata su onde ... di metri ... Qui è Radio Bucarest. In nostra prima (seconda, terza) trasmissione è terminata. A risentirci." Sp: "Aquí Bucarest. Muy buenas noches estimados oyentes. Comienza nuestra emisión en lengua española por campos de onda de ... metros". G: "Hier ist der Rumänische Rund- und Fernsehfunk mit der Sendung in deutscher Sprache. Sie hören uns auf Kurzwelle ... gleich ... kHz und auf Mittelwelle ... Liebe Hörerinnen und Hörer, R. Bukarest wünscht Ihnen Gute Nacht".

DX-LISTENERS CLUB, P. O. Box 1284V, Oslo 1, NORWAY. Issues »DX-NEWS« 11 times a year. International bulletin every second month. Offers awards for 30 European, 30 African, 25 Asian, 30 American and 10 Pacific countries verified. Price: £ 0-6-0 each. Membership fee incl. »DX-NEWS« N. kr. 15.-, £ 0-18-0 annually. Sample DX-NEWS - 1 IRC.
WRITE TODAY FOR FURTHER INFORMATION!

This is Bucharest calling....

RADIO BUCHAREST addresses you every day in 13 languages:

Arabic, English, French, German, Greek, Iranian, Italian, Portuguese, Romanian, Serbian, Spanish, Turkish and Yiddish.

If you want to get details about the life in Romania, about the achievements of the Romanian people, about their culture, science and art, about the Romania's viewpoint on the present international problems, listen to RADIO BUCHAREST.

The broadcasts also include Listeners' Letterbox, answers to Listeners' questions, request music, special programmes for radio amateurs, stamp collectors and tourists.

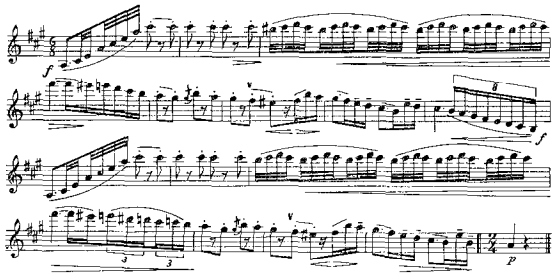
RADIO AMATEURS:

Radio Bucharest confirms all your correct reception reports. 6 new QSL cards are at your disposal this year.

ADDRESS
YOUR QUESTIONS
WISHES
SUGGESTIONS
TO

RADIO BUCHAREST - ROMANIA

INT-SIG:



V. by QSL-card – PUB: "Programul de Radio si Televiziune.

SPAIN

L.T: GMT+1 h – Pr.L: Spanish.

RADIO NACIONAL DE ESPAÑA (Gov.)

ADDR: General Yagüe 1, Madrid 20. Te: 2794600 – L.P: Dir. Gen. Broadc. TV: J. Aparicio Bernal. Vice Dir. Gen. Broadc: M. Aznar Acedo. Chief of Foreign Radio & TV Prgr. Sce: F. Fernández Shaw Dir. R. Nacional Network: J. M. Riancho Sanchez. Asst. Dir. RNE Network: R. Ramos Losada. Secr. RNE Network: F. Navarro Gonçalves. Dir. Tec. & Engineering Sce: A. Prieto de Arozarena. Chief Home Prgr: L. Rodriguez Machado. Chief Second Prgr: G. Vivó Bazo. Chief Third Prgr: A. M. Campoy Alías. Chief Foreign Prgr. Sce: L. de Andres Frutos. Chief Music Dept: E. Franco Manera. Chief Adm. Sce: J. L. Diez Crespo. Chief N. Sce: J. P. Salinas Jimenez. Public & Foreign Rel. Officer: E. Pascual Souto.

HOME SERVICE

STATIONS	kc	m	kW	h of tr.
Oviedo	548	547	50	07.45–23.20
Madrid (Central)	584	513	200	24 h
La Coruña	638	470	100	06.55–00.15
Sevilla	683	439	250	24 h
Barcelona	737	407	250	24 h
San Sebastian	773	388	20	05.57–00.15
Murcia	854	351	125	05.57–00.15
Madrid (Peninsular)	989	303	50	06.00–01.00
Malaga (Peninsular)	1007	298	10	06.50–00.15
Valencia (Peninsular)	1079	278	25	06.30–00.30
Barcelona (Peninsular)	1178	255	20	05.55–01.00
Cuenca (Peninsular)	1187	253	5	07.45–00.15
Madrid (3rd Prgr)	1223	245	5	05.55–24.00
Sevilla (Peninsular)	1313	228	5	06.00–00.10

(R. Peninsular = Comm. Service).

FM: 88.5Mc (Aitana) 30kW – 89.7Mc (Alfabia) 30kW – 90.6Mc (Bilbao) 0.375kW – 93.0Mc (Barcelona) 72kW – 98.5Mc (Barcelona 3rd Prgr) 98.5Mc 3kW – 93.4Mc (Cuenca) 0.3kW – 90.6Mc (Guadalcanal) 30kW – 90.0Mc (Jaizquibel) 30kW – 93.3Mc (La Coruña) 6kW – 90.9Mc (La Muela) 6kW – 90.3Mc (Lujar) 6kW – 99.5Mc (Madrid) 1.5kW – 98.1Mc (Madrid–Peninsular) 1kW – 99.9Mc (Malaga) 0.375kW – 98.1 Mc (Murcia) 0.3kW – 90.3Mc (Naranco) – 92.7Mc (Madrid) 72kW – 89.7Mc (Santiago) 30kW – 94.2Mc (Sevilla) 1.5kW – 94.2Mc (Asturias) 30kW – 92.7Mc (Sollube) 10kW – 92Mc (Valencia) 3kW.

FOREIGN SERVICE

Madrid-Arganda (G.C: 03.31W/40.18N).

kc	m	kW	kc	m	kW	kc	m	kW
6130	48.94	100	9360	32.05	50	9760	30.74	50
6140	48.86	100	9370	32.01	100	11715	25.61	100
7105	42.22	100	9570	31.35	100	15420	19.45	100

EUROPEAN AND OVERSEAS SERVICE

TO EUROPE	
Czech/Slovak	**kc**
06.30–07.30	6140, 7105, 9570
13.00–14.00	6130
17.00–18.00	9760
English	
20.20–20.50	9360
French	
20.50–21.20	9360
German	
21.20–21.40	9360
Hungarian	
07.30–08.00	6140, 7105, 9570
14.00–14.30	6130
18.00–18.30	9760
Italian	
21.40–22.00	9360
Polish	**kc**
08.00–09.00	6140, 7105, 9570
14.30 15.30	6130
18.30–19.30	9760
Serbo-Croat	
09.00–09.30	6140, 7105, 9570
15.30–16.00	6130
19.30–20.00	9760
Spanish	
13.15–14.00	6140, 7105, 9570
16.25–22.00	6140, 7105, 9570
Ukranian	
05.30–06.30	6140, 7105, 9570
12.00–13.00	6130
16.00–17.00	9760

TO NO. AFRICA/N. EAST	
Arabic	**kc**
17.30–19.30	9360
Arabic/French	
13.30–14.30	9360
16.00–17.00	9360
23.00–24.00	6130
TO SP. GUINEA	
Spanish	**kc**
07.30–08.00	9370
11.00–11.30	9370
18.00–22.45	9370

TO PHILIPPINES	
Spanish	**kc**
10.30–12.30	9570, 11715, 15420
TO USA/CANADA	
English	**kc**
01.00–01.45	6130, 9760
02.00–02.45	6130, 9760
03.00–03.45	6130, 9760
TO LATIN AMERICA	
Spanish	**kc**
23.00–05.00	6140, 9360
	9570, 11715

ANN: E: "This is the Voice of Spain broadc. from the Spanish National Radio" – INT-SIG: Gong and the following tune:

V. by QSL-card or letter – PUB: R. Nacional de España for Spanish Sce (fortnightly).

CADENA AZUL DEL MOVIMIENTO

The Cadena Azul del Movimiento belongs to the Secretaría General del Movimiento.

ADDR: Generalísimo 142 and Reina 33, Madrid. Te: 2350640. L.P: Dir. Gen: R. Merino López. Dir. Adm: M. Sagrera, Dir. Tec: M. Vazquez and P. Ampuero. Dir. Prgr: J. Leon Delestal.

STATIONS	Call	kc	m	kW	h of tr.
La Voz de Valladolid	EFE- 1	1570	191.6	1	07.00–23.30
La Voz de Palencia	EFE- 4	1133	264.8	2	07.00–23.00
La Voz de León	EFE- 5	1570	191.6	2	07.00–23.00
La Voz de Extremadura	EFE- 6	1133	264.8	5	07.00–23.00
La Voz de Alicante	EFE- 8	1570	191.6	2	06.45–23.30
La Voz de Alava	EFE-10	1570	191.6	1	07.00–15.30
La Voz de Madrid	EFE-14	1079	278.0	20	05.55–03.00
La Voz de Levante	EFE-17	1570	191.6	5	07.00–23.30
La Voz de Castellon	EFE-19	1133	264.8	1	07.00–23.00
La Voz del Principado de Asturias	EFE-22	1133	264.8	5	07.00–01.00
La Voz de Guipuzcoa	EFE-23	1570	191.6	5	07.00–23.00
La Voz de Cantabria	EFE-25	1570	191.6	2	07.00–24.00
La Voz de Vigo	EFE-31	1133	264.8	5	07.00–24.00
La Voz del Mediterraneo	EFE-33	1133	264.8	5	07.00–24.00
La Voz de Andalucía	EFE-58	1570	191.6	15	07.00–23.30
La Voz de Navarra	EFE-57	1133	264.8	5	07.00–17.00 20.00–23.01
R. J. = Radio Juventud					
R.J. de Cataluña	EFJ-15	1025	292.6	5	06.00–02.00
R.J. de Huelva	EFJ-51	836	358.9	5	07.00–02.00
R.J. de Soria	EFJ- 2	1574	190.6	2	08.00–15.00 18.00–23.00
R.J. de Cádiz	EFJ- 5	1097	273,5	2	08.00–24.00
R.J. de Galicia	EFJ-11	1385	216,6	2	07.00–01.00
R.J. de Murcia	EFJ-19	1133	264.8	2	07.00–01.00
R.J. de Albacete	EFJ-23	1574	190.6	2	08.00–24.00
R.J. de Almeria	EFJ-25	1133	264.8	2	08.00–24.00
R.J. de Ponferrada	EFJ-29	1133	264.8	2	08.00–15.00 18.00–23.00
R.J. de Béjar	EFJ-38	1570	191.6	2	09.00–14.00 20.00–23.00
R.J. de Asturias	EFJ-41	1097	273.5	2	07.00–00.15
R.J. de Vizcaya	EFJ-43	1133	264.8	5	07.00–01.00
R.J. de Baleares	EFJ-45	1385	216.6	2	08.00–24.00
R.J. de Zaragoza	EFJ-46	1133	264.8	5	07.00–01.00
R.J. de Calahorra	EFJ-50	1133	264.8	2	08.00–15.00 18.00–23.00
R.J. de Aranda de Duero	EFJ-51	1133	264.8	2	09.00–15.00 19.00–23.00
R.J. de Malaga	EFJ-56	1133	264.8	5	07.00–02.00

FM (all st's 0.25kW exc. where indicated): La Voz de Madrid (EFE-14) 98.9Mc 5kW: 06.00–03.00; La Voz del Ferrol (EFE15) 88.6Mc 0.3kW: 11.00–22.30; La Voz de la Costa Brava (EFE-40) 94.6Mc: 12.00–23.00; La Voz de Ausona (EFE-55) 91.2Mc: 10.00–22.30 – R. Juventud st's: España (EFJ-1) 88.8Mc 1kW: 09.00–24.00; Moron 87.9Mc 2kW: 08.00–23.00; Eibar (EFJ-42) 88.8Mc: 11.00–24.00; Cádiz (EFJ-5) 95.1Mc; Zaragoza (EFJ-46) 94.5Mc; Talavera (EFJ-37) 89.4Mc: 12.00–15.00, 19.30–22.30; Miranda de Ebro (EFJ-53) 89.7Mc: 10.00–16.00, 20.00–23.00; Mérida (EFJ-16) 92.4Mc: Cartagena (EFJ-26) 89.0Mc: 08.00–24.00; Torrelavega (EFJ-44) 89.4Mc: 10.30–23.00; Plasencia (EFJ-7) 88.8Mc: 09.00–16.00, 19.00–24.00; San Feliú de Llobregat (EFJ-14) 89.1Mc: 09.00–23.00; Barbastro (EFJ-21) 90.0Mc: 12.00–15.30, 19.30–24.00; Igualada (EFJ-4) 89.4Mc: 07.30–22.30; Málaga (EFJ-56) 92.5Mc: 09.00–20.00; Baleares (EFJ-45) 88.8Mc; Guadalajara 88.8Mc; Aranda de Duero (EFJ-52) 90.0Mc;

Calatayud 89.4Mc; Campo de Gibraltar 99.4Mc; Galicia (EFJ-11) 96.9Mc.
INT-SIG: Xylophone – **V.** by letter. **Rp** – **FI:** By own recourses.
AD: 10 min's per h.

SOCIEDAD ESPAÑOLA DE RADIODIFUSION (Comm.)

ADDR: Av. de José Antonio 32, Madrid 13. **Cable:** SER. **Telex:** 7638 E. **Te:** 2221181 – **L.P:** Dir. Gen: E. Fontán. Dir. Gen. Adjoint: R. Varela. Dir. Tec: J. Galindo. Dir. Prgr: M.R.Cano. Dir. Foreign Rel: B. Moreno – **Reg.Sce:** Barcelona-10: Caspe 6; Dir: M. Tarín – Valencia-2: D. Juan de Austria 3; Dir: V. Gomez Torre – Sevilla: R. González Abreu 4; Dir: F. Machado – Zaragoza: Av. Marina Moreno 21; Dir: J. Muro.

STATION (Main St's):

	Call	kc	m	kW	H. of tr.
R. Madrid	EAJ 7	800	375.0	20	06.00–03.00
R. Sevilla	EAJ 5	809	370.8	5	06.00–02.00
R. Barcelona	EAJ 1	817	367.2	5	03.00–02.55
R. San Sebastián	EAJ 8	1025	292.7	5	06.52–00.15
R. Extremadura	EAJ 52	1106	271.2	2	06.45–00.00
R. Valencia	EAJ 3	1259	238.3	5	06.00–01.00
R. Algeciras	EAJ 55	1412	212.5	2	06.50–23.00
R. Bilbao	EAJ 28	1412	212.5	2	05.00–01.00
R. Galicia	EAJ 4	1412	212.5	2	06.00–23.00
R. Cádiz	EAJ 59	1475	203.4	2	07.00–23.00
R. Mallorca	EAJ 13	1475	203.4	2	06.00–23.00
R. Reus	EAJ 11	1475	203.4	2	06.00–00.15
R. Alcira	EAJ 54	1520	197.4	2	06.30–23.30
R. Alicante	EAJ 31	1520	197.4	2	06.30–00.00
Associated Stations:					
R. Zaragoza	EAJ 101	872	344.0	20	06.30–04.00
R. Las Palmas	EAJ 50	953	314.8	2	07.00–01.00
R. Alcoy	EAJ 12	1106	271.2	2	06.30–00.00
R. Antequera	EAJ 26	1106	271.2	2	07.00–23.00
R. Coruña	EAJ 41	1106	271.2	2	06.45–00.30
R. Huesca	EAJ 22	1106	271.2	2	06.45–23.00
R. León	EAJ 63	1106	271.2	2	06.45–00.15
R. Manresa	EAJ 51	1106	271.2	2	06.45–00.15
R. Panadés	EAJ 35	1106	271.2	2	0.645–22.15
R. Salamanca	EAJ 56	1106	271.2	2	06.55–23.00
R. Vitoria	EAJ 62	1106	271.2	2	06.55–23.00
R. Valladolid	EAJ 47	1259	238.3	2	06.50–00.20
R. Castellón	EAJ 14	1412	212.5	2	06.45–03.00
R. Castilla	EAJ 27	1412	212.5	2	06.55–23.00
R. Ciudad Real	EAJ 65	1412	212.5	2	06.45–23.00
R. Gijón	EAJ 34	1412	212.5	2	06.45–23.10
R. Granada	EAJ 16	1412	212.5	2	06.40–01.00
R. Murcia	EAJ 17	1412	212.5	2	06.00–00.30
R. Requeté	EAJ 6	1412	212.5	2	06.45–23.00
R. Segovia	EAJ 64	1412	212.5	2	06.45–23.00
R. Almería	EAJ 60	1475	203.4	2	06.40–23.30
R. Asturias	EAJ 19	1475	203.4	2	06.45–23.00
R. Gandía	EAJ 23	1475	203.4	2	06.50–23.00
R. Pontevedra	EAJ 40	1475	203.4	2	06.45–00.00
R. Rioja	EAJ 18	1475	203.4	2	06.55–23.00
R. Santander	EAJ 32	1475	203.4	2	06.30–00.00
R. Zamora	EAJ 72	1475	203.4	2	06.45–00.15
R. Albacete	EAJ 44	1520	197.4	2	06.30–23.00
R. Gerona	EAJ 38	1520	197.4	2	06.00–00.00
R. Jaén	EAJ 61	1520	197.4	2	06.00–23.00
R. Jerez	EAJ 58	1520	197.4	2	06.50–23.00
R. Lérida	EAJ 42	1520	197.4	2	06.45–23.00
R. Lugo	EAJ 68	1520	197.4	2	06.45–23.00
R. Vigo	EAJ 48	1520	197.4	2	06.45–00.15

FM Stations: All st's 1kW exc. where indicated. **H. of tr.** 09.00–23.00.
Main St's:

Call	Mc	Call	Mc	Call	Mc	Call	Mc	Call	Mc
EAJ 7	93.9*	EAJ 8	97.2	EAJ55	95.7	EAJ59	92.2	EAJ54	95.7
EAJ 5	97.2	EAJ52	96.9	EAJ28	89.5	EAJ13	96.6	EAJ31	88.5
EAJ 1	93.9	EAJ 3	89.7	EAJ 4	95.0	EAJ11	89.7		

Associated Stations:

EAJ10195.4	EAJ56 96.9	EAJ16 95.4	EAJ40 89.1	EAJ58 98.5
EAJ12 96.3	EAJ62 92.5	EAJ17 91.2	EAJ18 91.8	EAJ68 91.8
EAJ26 96.3	EAJ47 90.9	EAJ 6 92.1	EAJ32 91.2	EAJ48 99.2**
EAJ41 89.4	EAJ14 95.7	EAJ64 96.6	EAJ72 89.9	
EAJ22 93.3	EAJ27 89.1	EAJ60 93.6	EAJ44 89.4	
EAJ51 95.1	EAJ65 92.1	EAJ19 90.3	EAJ38 90.0	
EAJ35 96.3	EAJ34 90.0	EAJ23 96.6	EAJ61 93.3	

*) 10kW **) 2kW.

ANN: Nat. Sce: "Transmite la Sociedad Española de Radiodifusion". **Local Service:** "Transmite R... de la Sociedad Española de Radiodifusion – **INT-SIG:** Harp, piano – **V.** by letter. Recordings accepted **PUB:** "ONDAS" fortnightly.

CADENA DE ONDAS POPULARES ESPAÑOLA

ADDR: Avda. José Antonio, 55 (Los Sótanos-25), Madrid 13.
STATIONS: Call: EAK (R. Popular de):

	Call	kc	m	kW	h of tr.
Albacete	EAK-46	1394	215.2	2	07.00–24.00
Alicante	EAK-31	1394	215.2	2	
Astorga (León)	EAK-48	1394	215.2	2	07.00–24.00
Asturias (Avilés)	EAK-91	1502	199.7	2	06.55–23.00
Badajoz	EAK-21	1394	215.2	2	08.00–23.00
Bilbao	EAK-13	1502	199.7	2	05.54–23.00
Burgos	EAK-3	1502	199.7	2	07.00–23.00
Ciudad Real	EAK-22	1502	199.7	2	07.00–22.00
Figueras	EAK-82	1430	210.0	2	09.00–23.00
Guimar-Tenerife	EAK-83	1133	264.8	2	
Huelva	EAK-14	1430	210.0	2	07.00–23.00
Ibiza	EAK-24	1502	199.7	2	
León	EAK-25	1430	210.0	2	07.00–23.00
Lérida	EAK-15	1430	210.0	2	06.55–23.00
Lorca	EAK-29	1430	210.0	2	08.00–23.00
Mallorca-Palma	EAK-18	1394	215.2	2	07.00–22.30
Menorca-Mahón	EAK-67	1430	210.0	0.4	
Córdoba	EAK-90	1394	215.2	2	06.45–22.00
Murcia	EAK-12	1502	199.7	2	06.00–24.00
Pamplona	EAK-4	1502	199.7	2	07.00–23.00
Puertollano	EAK-23	1430	210.0	2	
Reus	EAK-53	1394	215.2	2	
Salamanca	EAK-19	1502	199.7	2	08.00–23.30
San Sebastian	EAK-44	1394	215.2	2	07.00–24.00
Radio Vida (Sevilla)	EAK-2	1502	199.7	2	06.00–01.00
Malaga	EAK-42	1430	210.0	2	
Valencia	EAK-5	1430	210.0	2	05.30–24.00
Zamora	EAK-37	1394	215.2	2	07.00–23.00
Zaragoza	EAK-6	1394	215.2	2	07.00–23.00
FM: Zamora	EAK-37	97Mc	1kW		07.00–23.00

F.PL: FM for all mw st's in Almeria, Avila, Barcelona, Cáceres, Castellón, Granada, Guadalajara, Huesca, Jaén, Jerez de la Frontera (Cádiz), El Ferrol del Caudillo (La Coruña), Logroño, Loyola, Lugo, Madrid, Orense, Santander, Valladolid, Vigo (Pontevedra), Vitoria.

CADENA EMISORAS SINDICALES (CES)

ADDR: Huertas 73, Edificio "Pueblo", Madrid. **Te:** 2172162 – **L.P:** Dir. Gen: J. Ramón Alonso.
STATIONS:

Call	Name and Location	kc	kW
CES-5	Voz de Granada, Granada	836	5
CES-4	R. Atlantico, Las Palmas	1097	20
CES-3	R. Gredos, Avila	1133	15
CES-8	Voz del Guadalquivir, Sevilla	1133	5
CES-9	Voz de Jaen, Jaén	1133	5
CES-12	R. Atalaya, Cabra	1133	3
CES-13	Voz de C. Real, C. Real	1133	5
CES-17	Voz de Lugo, Monforte	1133	3
CES-19	Voz Tierra Campos, Zamora	1133	3
CES-2	R. Badajoz, Badajoz	1259	5
CES-11	R. Centro, Madrid	1385	25
CES-16	Voz de La Palma, Sta. Cruz	1385	3
CES-1	R. Teruel, Teruel	1484	5
CES-6	R. Tortosa, Tortosa	1570	3
CES-7	Voz de Lerida, Tárrega	1570	5
CES-10	Voz de La Mancha, Socuéllamos	1570	5
CES-14	Voz de Gerona, Gerona	1570	3
CES-15	R. Marbella, Marbella	1570	5
CES-18	Voz del Miño, Orense	1570	3

FM: CES20 R. Tudela, Tudela 88.2Mc 0.5kW – CES21 R. Costa Dorada, Ulldecona 95Mc 0.5kW – CES22 R. Peñarroya, Peñarraoya 93.4Mc 0.5kW.
V. by letter. Recordings accepted – **F.PL:** FM network.

RUEDA DE EMISORAS RATO

ADDR: Jorge Juan, 27 Madrid. **Te:** 2760407.
L.P: Dir. Gen: R. de Rato. Dir. Tec: A. Caballos P.
MAIN STATION: EAJ49 R. Toledo 1520kc 197.4m: 07.00–23.00. **Branch St's:** EAJ60 R. Almeria[2] 1475kc, EAJ26 R. Antequera[3] 1106kc, EAJ59[4] R. Cadiz 1475kc, EAJ35 R. Panadés[5] 1106kc.
[1] Navarro Ledesma 4, Toledo – [2] Arapiles 2, Almeria – [3] Ramon y Cajal 41, Antequera (Malaga) – [4] José del Toro 10, Cadiz – [5] Rambla del Caudillo 10, Villanueva y Geltru (Barcelona).
D.PRGR: 08.00–23.00. **N:** every h.
INT-SIG: Electric gong (two tones) – **V.** by letter. Recordings accepted

RADIO ESPANA (Comm)

ADDR: Apartado Correos 50.753, Madrid 13. **Te:** 222.83.20. **Cable:** Radiospaña – **HOME SCE:** Madrid EAJ2 917kc 327.2m 12kW: 07.00–01.00 – **ANN:** "EAJ2 R. España, Madrid".

R. ESPAÑA DE BARCELONA

ADDR: Ramblas 126, Barcelona 2. Te: 2-22-0751 – L.P: Dir. Gen: G. Serraclara de la Pompa. St. Mgr: A. Banda Moras.
HOME SCE. (System: Collins): EAJ15 1124kc 266.9m 10kW: 06.00–02.00 – V. by letter. Recordings accepted.
Affiliated st's: EAJ38 R. Gerona 1520kc – EAJ42 R. Lérida 1520kc, 2kW: 07.00–23.00 – EAJ51 R. Manresa 1106kc 2.5kW.

COMPAÑIA DE RADIODIFUSION INTERCONTINENTAL (Comm.)

ADDR: Diego de León 50, Madrid. Cable: Ondatlantic.
STATION: EAJ29 953kc 314.8m 20kW – 95.1Mc 1kW.
HOME SCE: 07.45–02.00.
ANN: "Aqui R. Intercontinental, Madrid" – INT-SIG: Xylophone. V. by QSL-card or by letter. Recordings accepted.

OTHER STATIONS:

	Call	kc	m	kW	h of tr.	
R. Sabadell	EAJ-20	1475	203.4	3	07.00–23.00	
R. Melilla	EAJ-21	1520	197.4	1	06.00–15.30,	19.00–23.00
R. Córdoba	EAJ-24	1475	203.4	2	08.00–24.00	
R. Tarrasa	EAJ-25	1412	212.4	0.2	08.00–22.30	
R. Onteniente	EAJ-30	1412	212.4	1	09.00–16.00,	19.00–23.00
R. Miramar-Badalona	EAJ-39	1520	197.4	5	07.00–24.00	
R. Orense	EAJ-57	1106	271.2	3.8	08.30–23.00	
R. Linares	EAJ-37	1106	271.2			
R. Elche	EAJ-53	1475	203.4	5	07.00–23.30	
R. Ceuta	EAJ-46	1106	271.2	2	07.00–23.00	

FM:
R. Miramar-Badalona (EAJ-39) 94.8Mc 1kW: 07.00–24.00; R. Elche (EAJ-53) 94.8Mc 0.5kW: 07.00–23.30.

ARMED FORCES RADIO & TV SCE (US Military)

FM-st's: Madrid, Sevilla, Zaragoza 89.7Mc (all 1kW) – Rota 96.0Mc 5kW – Alcoy, Elizondo, Rosas, Soller 96.0Mc (all 0.045kW).

SWEDEN

L.T: GMT+1 h – Pr.L: Swedish.

SVERIGES RADIO (Swedish Broadcasting Corporation)

(Non comm. semigov. broadc. corpo.)
ADDR: Radiohuset, Oxenstiernsgatan 2, Stockholm, Postal Addr: Box 955, Stockholm 1. Te: 670865 (local 631000) Cable: Broadcast. L.P: Chmn. Board of Governors: P. Eckerberg. Dir. Gen: O. Rydbeck. Dir. Finance Dept: L. Öhrström. Dir. Eng: J. von Utfall. Dep. Dir. Eng: C. Wachtmeister. Dir. Prgr (Radio): N. O. Franzén. Dir. Prgr (TV): N. E. Baehrendtz. Dep. Adm. Dir. (TV): O. Wahlund. Head TV Plan: L. E. Kjellgren. Dir. Staff: N. Ragnå. Dep. Dir. (Dev. & Plan): K. E. Lundevall. Leg. Adv: G. Hansson. Head of Dir. Gen Off: N. P. Lindskog. Asst. to the Dir. Gen. (Int.AFF): E. W. Ploman. Head School Broadc: R. Lundgren. Asst. Head: S.S. Allebeck. Head Press and Inf: Ph. von Krusenstierna. Head Int. Dept. (Ext. Rel. and Overs. Prod.): Mrs. B. Svinhufvud. Int. Dept. Secr: G.Dahlin. Eurovision exch: Mrs. M. Lamby. Radio exch: Mrs. B. de Radwan. Overs.prod: B. Järrel.

KUNGL. TELESTYRELSEN (The Telecommunications Administrations) has the responsibility for the distribution of the prgr's produced by Sveriges Radio and has also charge of the collection of licence fees.
ADDR: Box 16065, Stockholm 16. Te: 236040. Cable: Radiobyrån.
L.P: Dir. Gen: B. Bjurel. Chief of R. Dept: K. Ekström. Chief of division handling broadc. matters: S. R. Larsson.

STATIONS: Medium Waves: *=st's carrying night prgr.

Station	Prgr.	kc	kW	Station	Prgr.	kc	kW
Boden	2	1594	0.15	Kiruna	1	1562	0.5
Borås	1	1562	2		2	1394	0.15
	2	1394	0.15	Kristinehamn	1	1448	0.15
Eskilstuna	1	1562	0.5		2	1594	0.15
Falkenberg	1	1448	0.15	Ludvika	2	1394	0.15
Falun	1	*1223	100	Luleå	1	*182	10
Gävle	1	1448	0.5		2	1394	0.15
Göteborg	1	*980	150	Malmberget	1	773	2
	2	1394	0.25		2	1394	0.15
Halmstad	1	1562	2	Malmö	1	1562	2
	2	1394	0.15	Mariestad	2	1394	0.15
Hudiksvall	1	1448	1.5	Motala	1	*191	600
	2	1394	0.15	Norrköping	1	1562	1.5
Hälsingborg	1	1448	1.5	Piteå	2	1394	0.15
Hörby	1	*1178	100	Porjus	1	1529	0.075
Jönköping	1	1448	2		2	1594	0.075
	2	1594	0.2	Stockholm	1	*773	150
Kalmar	1	1562	2		2	1394	0.25
Karlskrona	1	1448	1.5	Sundsvall	1	*593	150
Karlstad	1	1562	1.5		2	1394	0.15
	2	1394	0.15				

Station	Prgr.	kc	kW
Säffle	1	1448	0.15
	2	1594	0.15
Söderhamn	1	1562	0.06
	2	1394	0.15
Trollhättan	1	1448	2
	2	1594	0.15
Uddevalla	1	1562	0.5
	2	1394	0.15
Umeå	1	1448	2
	2	1594	0.15
Uppsala	1	1562	2
Varberg	1	1562	2
	2	1394	0.15
Visby	1	1448	0.5
Vänersborg	2	1394	0.15
Västervik	2	1394	0.15
Västerås	1	1448	2
Örebro	1	1562	0.5
Örnsköldsvik	1	1562	1.5
	2	1394	0.15
Östersund	1	*719	150

Short Waves: Hörby I, II 100kW. 6065kc 49.46m – 9625kc 31.17m.

FM:	Prgr.	Mc	kW
Arvidsjaur	1	89.4	60
	2	94.2	60
	3	97.1	60
Björkliden(s)	1	88.0	0.3
	2	93.9	0.3
Boden	1	90.6	60
	2	94.5	60
	3	99.4	60
Bollnäs	1	88.4	60
	2	91.8	60
	3	96.0	60
Borlänge	1	89.4	60
	2	93.0	60
	3	97.7	60
Borås	1	88.5	10
	2	94.6	10
	3	97.9	10
Bäckefors	1	92.7	60
	2	96.8	60
	3	99.1	60
Emmaboda	1	93.0	60
	2	96.7	60
	3	99.8	60
Enafors(s)	1	92.8	0.03
	2	96.2	0.03
Funäsdalen(s)	1	89.6	0.03
	2	92.9	0.03
Gäddede(s)	1	88.9	0.03
	2	96.2	0.03
Gällivare	1	88.3	60
	2	94.9	60
	3	98.5	60
Gävle	1	88.1	60
	2	97.4	60
	3	99.8	60
Göteborg	1	89.3	60
	2	96.3	60
	3	99.4	60
Halmstad	1	87.7	60
	2	91.2	60
	3	95.4	60
Haparanda	1	91.3	60
	2	93.6	60
	3	97.9	60
Hälsingborg	1	89.5	3
	2	95.7	3
	3	98.7	3
Hörby	1	88.8	60
	2	92.4	60
	3	97.0	60
Idre(s)	1	88.0	0.03
	2	89.9	0.03
Karlskrona	1	89.1	10
	2	95.0	10
	3	97.7	10
Karesuando(s)	1	87.6	0.3
	2	90.0	0.3
Kiruna	1	89.1	60
	2	92.7	60
	3	96.4	60
Laisvall(s)	1	90.8	0.03
	2	95.1	0.03
Lycksele	1	92.9	60
	2	95.4	60
	3	98.7	60
Malmö	1	87.9	3
	2	93.3	3
	3	98.0	3
Mora	1	92.2	10
	2	96.7	10

FM:	Prgr.	Mc	kW
Motala	1	91.1	3
	2	93.8	3
	3	98.2	3
Norrköping	1	90.0	60
	2	93.5	60
	3	98.7	60
Nässjö	1	89.6	60
	2	92.1	60
	3	99.0	60
Pajala	1	87.9	60
	2	93.0	60
Seitevare(s)	1	90.9	0.03
	2	93.7	0.03
Skellefteå	1	93.8	10
	2	96.3	10
	3	99.9	10
Skövde	1	88.9	60
	2	95.1	60
	3	97.5	60
Sollefteå	1	88.2	60
	2	93.5	60
	3	98.1	60
Stockholm	1	92.4	60
	2	96.6	60
	3	99.3	60
Stordalen(s)	1	89.6	0.03
	2	92.3	0.03
Storuman	1	87.6	60
	2	91.2	60
Strömstad(s)	1	91.6	0.03
	2	94.3	0.03
Sundsvall	1	92.7	60
	2	96.9	60
	3	99.2	60
Sunne	1	90.9	60
	2	94.5	60
	3	98.5	60
Sveg	1	90.6	60
	2	94.9	60
	3	97.9	60
Sysslebäck(s)	1	88.8	0.3
	2	92.5	0.3
Torneträsk(s)	1	87.6	0.03
	2	98.0	0.03
Trollhättan	1	91.9	3
	2	95.8	3
	3	99.8	3
Täsjö	1	89.8	60
	2	94.7	60
	3	97.5	60
Tärnaby(s)	1	88.9	0.03
	2	95.7	0.03
Uddevalla	1	89.9	3
	2	93.1	3
	3	97.2	3
Uppsala	1	90.3	3
	2	93.3	3
Varberg	1	90.4	3
	2	93.6	3
Vassijaure(s)	1	90.7	0.03
	2	95.1	0.03
Vietas(s)	1	89.9	0.03
	2	93.9	0.03
Visby	1	87.6	15
	2	94.1	15
	3	97.2	15
Vislanda	1	88.0	10
	2	90.6	10
	3	94.7	10

radio sweden

SCHWEDEN
SUÈDE
SUECIA
SUECIA

calling the world in six languages daily:

ENGLISH . FRENCH . GERMAN . SPANISH
PORTUGUESE . SWEDISH

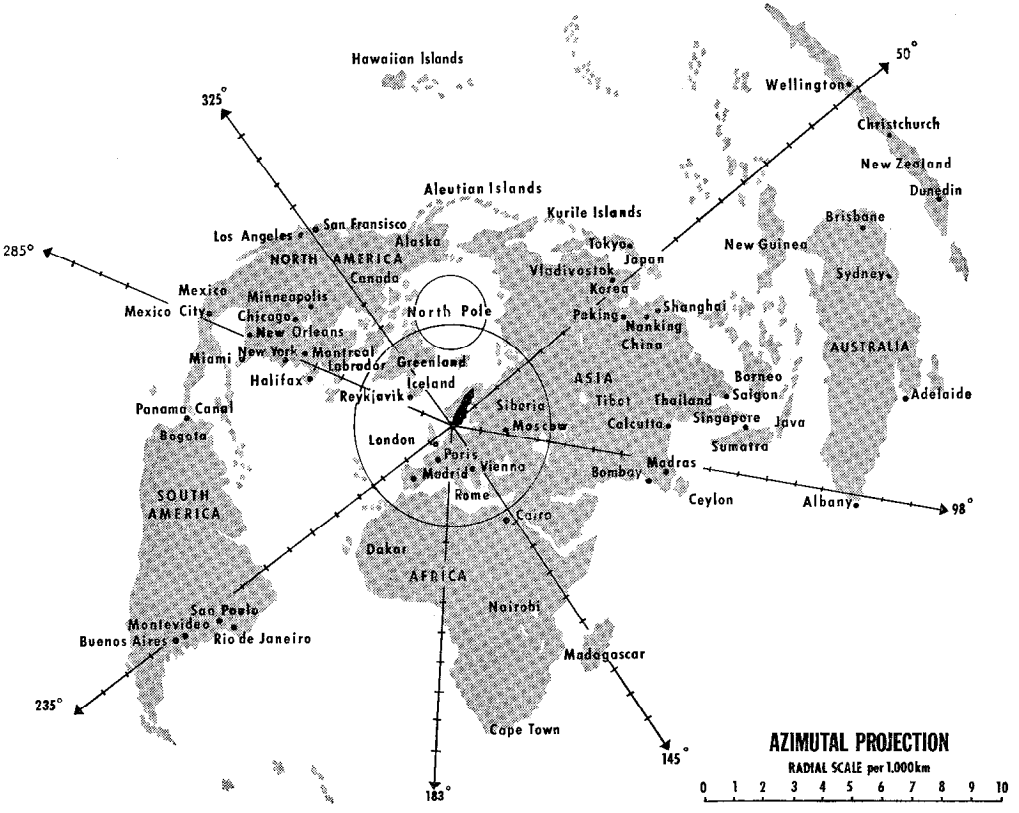
and bringing News, Music and Feature Programmes over Radio Sweden's 100 kW transmitters.

The transcription service

offers a wide range of recorded programmes about Sweden.

The television service

offers films about Sweden in different languages or with an international soundtrack.



FM:	Prgr.	Mc	kW
Vännäs	1	88.5	60
	2	92.1	60
	3	95.8	60
Västervik	1	88.3	25
	2	91.8	25
	3	96.0	25
Västerås	1	90.7	15
	2	95.7	15
	3	98.0	60
Ånge	1	93.2	10

FM:	Prgr.	Mc	kW
	2	95.6	10
	3	99.6	10
Örebro	1	87.9	60
	2	91.5	60
	3	99.6	60
Örnsköldsvik	1	90.8	3
	2	94.4	3
	3	97.8	3
Östersund	1	87.9	60
	2	91.5	60
	3	94.0	60

St's to open before July 1st 1967: 7 st's (prgr I+II+III).
Prgr 3: Mora 98.95Mc, Pajala 95.9Mc, Storuman 99Mc, Uppsala 96.2Mc.

HOME SERVICE

FIRST PRGR. (netw. of the Spoken Word): 05.00 (Sun 06.00) -22.00 (approx). – **Night Prgr.** on 191 kc + FM st's for 3rd prgr.: Sun/Mon/Tues/Thurs 23.00–04.40, Wed/Fri 00.00–04.40, Sat 00.00–05.45.

Short Waves: 06.30–07.15 on 6065 kc, 11.30–12.10 on 6065/9705 kc, 17.30–18.00 on 6065 kc.

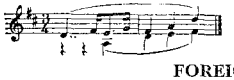
N: D: 07.00, 11.30, 14.00, 16.00 17.30, 18.00, 21.00. W: 05.00, 05.30, 06.00, 06.30, 10.00, 20.00. (exc. Sat) – **Wrp:** (incl. Forecast for Swedish Waters) D: 05.30, 07.00, 11.30, 17.25, 20.50, Forecast for Swedish Waters only: D. 16.00 – **Rlg. Prgr's:** Morning Sce': W: 05.20, 06.15. Evening prayer: D. 21.05. Sun. Divine Sce: 10.00, 16.10. **News Magazine:** Mon–Fri 20.00–20.50. **Concert:** D. 14.10.

SECOND PRGR: (Education & Serious Music): During terms School broadcasts Mon–Fri 08.00-11.00, 12.00-13.00 (Wed 12.00-13.00 only) – Sun/Mon/Tues 17.15-22.00*, Thurs 16.30-22.00*, Wed/Fri/Sat 17.15-23.00. All evenings 18.30 to closing: Serious Music. (*approx).

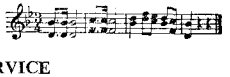
THIRD PRGR: Light music 24 h (incl. Night/prgr's). **N:** 22.00-22.05. Summaries one min before the h: W 04.59-20.59, Sun 09.59-20.59. – Request Records: D 11.00-12.00.

ANN: (*Nat. Prgr*): *"Sveriges Radio..." and the name of the transmitting st*, for instance: "Sveriges Radio, Stockholm" – **INT-SIG:** Home Service 1 st Prgr: The opening notes from Carl Michael Bellman's "Storm och böljor tystna re'n and 2nd Prgr: from Bellman's "Fredmans Epistel No 64" : *"Fäll dina ögon och skäms nu din tåsse"*

Home Service 1 st Prgr:



Home Service 2nd Prgr:



FOREIGN SERVICE

Stations: Hörby 100kW (G.C: 13.44E/55.49N).

kc	m	kc	m	kc	m	kc	m	kc	m
1178	254.7	6065	49.46	9705	30.91	11810	25.40	17840	16.82
5990	50.08	7270	41.27	11705	25.63	11880	25.25	21690	13.83

Areas: I=Europe; II=Middle East; III=Far East; IV=Africa; V=So. Asia; VI=Eastern No. America; VII=Western No. America; VIII=So. America.

Schedule 6/11 66–5/3 67

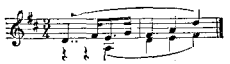
English	Area	kc
09.00–09.30	I/II	**6065/21690
11.00–11.30	I/III	**6065/9705
12.30–13.00	IV/III	9705/21690
14.00–14.30	V/VI	11810/17840
16.00–16.30	VII/VI	11705/17840
19.00–19.30	IV/II	11705/11880
20.15–20.45	I/VI	**6065/11705
22.45–23.15	III/VIII	7270/11705
23.30–24.00	I	1178
00.30–01.00	VI	5990
02.00–02.30	VI	5990
03.30–04.00	VII	5990
05.15–05.45	V	11705
French		
09.30–10.00	I/II	**6065/21690
15.00–15.30	V/VI	11810/17840
18.00–18.30	IV	11705
20.45–21.15	I/VI	**6065/11705
03.00–03.30	VII	5990
05.45–06.15	V	11705
German		
10.30–11.00	I	**6065

German		kc
17.30–18.00	IV	11705
23.00–23.30	I	1178
Portuguese		
22.00–22.30	I/VIII	**6065/11705
00.30–01.00	VIII	11705
02.00–02.30	VIII	11705
Spanish		
21.30–22.00	I/VIII	**6065/11705
00.00–00.30	VI/VIII	5990/11705
01.30–02.00	VI/VIII	5990/11705
Swedish		
06.30–07.15*I		**6065
10.00–10.30	I/II	**6065/21690
11.30–12.10*I/III		**6065/9705
13.00–13.30	IV/III	9705/21690
14.30–15.00	V/VI	11810/17840
16.30–17.00	VII/VI	11705/17840
17.30–18.00*I		**6065
18.30–19.00	IV/II	11705/11880
23.15–23.45	III/VIII	7270/11705
01.00–01.30	VI/VIII	5990/11705
04.00–04.30	VII	5990
04.45–05.15	V	11705

*=relay Home Sce. 1st prgr; **=omnidirectional aerial.

N: at the beginning of each tr – **DX-Prgr:** English: Tues 09.20, 11.20, 12.50, 14.20, 16.20, 19.20, 20.35, 23.05, 23.50; Wed 00.50, 02.20, 03.50, 05.35. French: Tues 09.50, 15.20, 18.20, 21.05; Wed 03.20, 06.05. German: Wed 10.40, 17.40, 23.10. Portuguese: Every other Thurs/Fri 22.10, 00.40, 02.10. Spanish: Thurs 21.50, Fri 00.20, 01.50.

ANN: E: *"This is* R. Sweden". G: *"Hier ist* R. Schweden". Fr: "Ici R. Suéde". Sp. & P: "Aqui R. Suécia, Estocolmo". Sw: "Utlandsprogrammet, Sveriges Radio".
INT-SIG: Foreign Sce: The opening notes from Carl Michael Bellman's *"Storm och böljor tystnas re'n"*.



V. by QSL-card, folder and/or letter. R. Sweden will appreciate all letters and reports on reception of the transmissions. Prgr. schedules by writing to R. Sweden, Box 955, Stockholm 1.
PUB: Monthly: "Radio Sweden" in six languages: English, German, French, Spanish, Portuguese, Swedish.

IBRA RADIO AB (Non-Comm, Non-Gov. Christian)
ADDR: Box 821, Stockholm 1 – ***Studios:*** The *Main studio is* Sveavägen 34, Stockholm. **Cable:** "Ibra-Radio" – **L.P:** Pres: Dr. Lewi Pethrus. Dir. Prgr: H. Carlsson.

STATIONS broadc. IBRA prgr's:
R. Bukawu, Congo – R. Litoral, Cochabamba, Bolivia – R. WIVV, Vieques, Puerto Rico – R. Riquelme, Coquimbo, Chile – R. Paraguay, Asuncion – R. Kanto, Yokohama – * R. Hokkaido, Hokkaido.
R. Corrientes, Corrientes, Argentina – R. St. HCJB (The Voice of Andes): *Every Wed in Swedish* – R. *Independencia*, Montevideo, Uruguay – R. WEBH, Chicago, USA: FM-broadcast in Swedish every Sun (R. Sweden) – **PUB:** "IBRA" in a Swedish and an English edition.

SWITZERLAND (Confederation)

L.T: GMT+1 h – **Pr.L:** German, Swiss German dialects, French, Italian, Romanche.

SWISS BROADCASTING CORPORATION (SBC)
(A non profit making Comp) – **ADDR:** Schweizerische Radio- und Fernsehgesellschaft (SRG). Société suisse de radiodiffusion et television (SSR), Società Svizzera di Radiotelevisione (SSR), Giacomettistrasse 1, 3000 Berne 16. **Cable:** Radif. **Te:** (031) 44.55.55 – **L.P:** Pres. of the Board of Adm: Dr. A. Guinand. Dir. Gen: M. Bezençon. Dir. Adm. & Dep. Dir. Gen: D. Carl.

Schweizerischer Kurzwellendienst, Service suisse des ondes courtes, Swiss Shortwave Service, Giacomettistrasse 1, 3000 Berne 16. **Te:** (031) 44.66.44 – **L.P:** Dir: J. Curchod.

Telephonrundspruch, Telediffusion (Wired Broadc.), *Giacomettistrasse* 1, 3000 Berne 16. **Te:** (031) 44.14.44 – **L.P:** Dir. Sw-Sce. and Telediff: J. Curchod, Head Telediff: B. Bruni.
According to the new State concession in force (from November 1st, 1964) the Swiss Broadc. Corpo. (SBC) comprises three reg. radio and tv societies, namely:

Programme services in German:
"Radio- und Fernsehgesellschaft der Deutschen und der Raetoromanischen Schweiz" (*6 reg. societies, 3 radio studios and 1 TV studio*) – **L.P:** Reg. Radio Dir: Dr. F. Ernst, Bale – **Radio studios:** R. Berne, Schwarztorstrasse 21, 3000 Berne. Dir: M. Bolliger. R. Bâle, Novarastrasse 2, 4000 Bâle. Dir: Dr. P. Meyer-Gutzwiller. R. Zürich, Brunnenhofstrasse 20, 8000 Zürich. Dir: Dr. G. H. Padel.

Programme services in French:
"Societe de Radiodiffusion et de Television de la Suisse Romande" (2 reg. societies, 2 radio studios, 1 TV studio) – **L.P:** Reg. Radio-Dir: J. P. Méroz, Lausanne – **Radio studios:** R. Genève, 66, Boulevard Carl-Vogt, 1200 Genève. Dir: R. Aubert. R. Lausanne, Maison de la Radio, 1000 Lausanne. Dir: Dr. P. Vallotton.

Programme services in Italian:
"Societa Cooperativa per la Radiotelevisione nella Svizzera Italiana" (1 radio studio, 1 TV studio) – **Radio studio:** Radio-Lugano, 6900 Lugano-Besso. Dir: Dr. S. Molo.

HOME SERVICE

GERMAN:
First Prgr: Sun 06.45–22.20, Mon–Sat 05.15–22.20.

	kc	m	kW
Beromünster	529	567.1	150
Basel	1562	192.0	0.5

	kc	m	kW
Coire	1562	192.0	0.5
Sool	1562	192.0	0.5

FM:	ch	Mc	kW/W
Attinghausen	28	95.3	0.1
Bantiger	4	88.2	0.6
Brig	23	93.9	0.5
Brusio	2	87.6	6W
Buchserberg	15	91.6	0.25
Celerina	33	96.0	0.75
Davos	29	95.7	0.22
Dél	27	95.1	0.75
Ernen	40	99.0	2

	ch	Mc	kW/W
Geissholz	28	95.4	0.75
Gotschnagrat	8	89.4	1.2
Gurtnellen	30	96.0	90W
Hornfluh	3	87.9	0.75
Klewenalp	27	95.0	22.5W
Ladir	16	91.9	1.125
Leuk	20	93.0	0.75
Niederhorn	34	97.2	9
Pfänder	31	96.3	130W

FM:	ch	Mc	kW/W		ch	Mc	kW/W
Poschavio	4	88.2	12W	Sool	26	94.8	0.75
Rigi	13	90.9	30	Tarasp	27	95.1	0.5
St.Chrischona	12	90.6	18	Uetliberg	25	94.6	1.8
Sta. Maria	20	93.0	30W	Valzeina	11	90.3	0.75
Säntis	43	99.9	10	Weisshorn	26	94.8	0.1
Sils	29	95.7	36W				

N, Wrp: 05.15, 06.00(Sun 06.50), 11.30, 18.15, 21.15 – **Current N. items, Comm:** D 08.00, 09.00, 10.00, 11.40, 14.00, 15.00, 17.00, 18.00, 18.25, 21.20, 22.15. **World Chronicle:** Fri 18.50. **Review for Swiss abroad:** Mon 21.20 – **"Samtags Rundschau"** (domestic affairs): Sat 13.00 – **Im Auto durch die Schweiz** (for motorists): W 06.30–07.30 – **Symphony:** Tues 19.00.

Second Prgr: W 16.30–22.20, Sun approx. 11.00–21.15. **Local broadc. in Romanche:** Tues 19.00–19.30 (Current N-items), Thurs 16.00–16.30 children's prgr. Every third week: Sun 08.15 (Sermon). **Local broadc. in German:** Sat/Sun 17.30–18.00.

FM:	ch	Mc	kW/W		ch	Mc	kW/W
Attinghausen	17	92.1	400W	Ladir	31	96.4	1.125
Bantiger	21	93.2	60	Leuk	36	97.8	0.75
Brig	8	89.4	0.5	Niederhorn	22	93.6	9
Buchserberg	33	96.9	0.25	Pfänder	36	97.7	130W
Celerina	3	87.9	0.75	Rigi	32	96.6	30
Davos	3	87.9	0.22	St.Chrischona	40	99.0	18
Dèl	38	98.4	0.75	Sta. Maria	6	88.8	30W
Ernen	28	95.4	2	Säntis	28	95.4	10
Geissholz	4	88.2	0.75	Sils	23	93.9	36W
Gotschnagrat	36	97.8	1.2	Sool	40	99.0	0.75
Gurtnellen	15	91.5	90W	Tarasp	15	91.5	0.5
Hornfluh	30	96.0	0.75	Uetliberg	35	97.5	1.8
Klewenalp	11	90.3	22.5W	Valzeina	41	99.3	0.75
				Weisshorn	2	87.6	0.1

FRENCH: First Prgr: Sun 06.10–22.30, Mon–Fri 05.10–22.30, Sat 05.10–24.00.
Sottens 764kc 392.6m 150kW – Savièse 1367kc 219.5m 0.5kW

FM: Rel. Sottens:

	ch	Mc	kW		ch	Mc	kW
Bantiger	27	95.1	12	Les Ordons	24	94.2	1.5
Hornfluh	38	98.4	0.75	Leuk	4	88.2	0.75
La Chaux				Moutier	38	98.4	7W
de Fonde	31	96.3	1.5	Ravoire	41	99.3	1.2
La Dole	26	94.8	45	Val de Travers	28	95.5	22W

N, Wrp: 05.15(Sun 06.15), 11.45, 17.00, 21.30 – **Comm (Current N-items):** 06.15, 07.00, 08.00, 09.00, 10.00, 11.00, 13.00, 14.00, 15.00, 16.00, 17.10, 18.00, 19.00, 22.25 – **"La situation internationale":** Fri 18.30 – **"Route Libre":** Sat 07.05 – **Symphony:** Wed 19.30, Thurs 20.30.

Second Prgr: Sat/Sun 11.00–22.00. Mon–Fri 11.00–13.00, 17.00–22.00.

FM:	ch	Mc	kW		ch	Mc	kW
Bantiger	41	99.3	12	Les Ordons	42	99.6	1.5
Hornfluh	15	91.5	0.75	Leuk	11	90.3	0.75
La Chaux				Moutier	18	92.3	7W
de Fonde	2	87.6	1.5	Ravoire	29	95.7	1.2
La Dole	14	91.2	45	Val de Travers	40	98.5	22W

ITALIAN: First Prgr: Sun 07.00–22.30, Mon–Thurs 06.00–13.05, 14.59–22.30, Fri 06.00–22.30, Sat 06.00–24.00.
Monte Ceneri 557kc 538.6m 50kW.

FM:	ch	Mc	kW/W		ch	Mc	kW/W
Airolo	4	88.0	0.01	M. Morello	31	96.3	0.75
Brusio	15	91.5	6W	M.S.Salvatore	39	98.7	12
Cardada	34	97.2	0.6	Peccia	4	88.2	0.1
Grono	42	99.6	1	Pizzo Matro	36	97.8	0.75
M. Ceneri	33	96.9	0.75	Poschavio	23	93.9	12W

N, Wrp: 06.15 (Sun 07.15), 11.30, 18.15, 22.00 – **Comm (Current N-items):** D 07.00, 09.00, 11.00, 11.35, 13.00, 15.00, 17.00, 18.20, 19.00 (Fri), 21.00, 22.05 – **"Radiomattina"** (for motorists): W 07.30 – **Symphony:** Thurs 19.30.

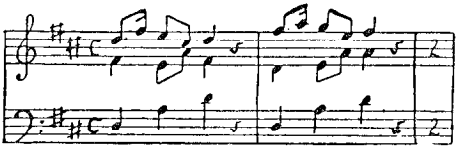
Second Prgr: W 17.00–21.30, Sun 13.00–16.15, 19.00–21.30.

FM:	ch	Mc	kW/W		ch	Mc	kW/W
Airolo	26	94.8	0.01	M. Morello	6	88.8	0.75
Cardada	14	91.3	0.6	M.S.Salvatore	20	93.0	12
Grono	26	94.8	1	Peccia	23	93.9	0.1
M. Ceneri	8	89.4	0.75	Pizzo Matro	10	90.0	0.37

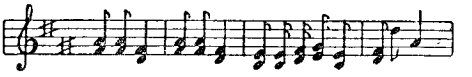
JOINT PRGR'S: (Beromünster, Sottens, Monte Ceneri): W 10.05–11.00 & Sat 22.30–24.00.

ANN: Swiss National tr's – First Prgr's: Beromünster: "Hier ist das Schweizer Radio". **Sottens:** "Radiodiffusion suisse, programme romand". **Monte Ceneri:** "Radio della Svizzera italiana, Stazione nazionale di Monte Ceneri, Studio di Lugano".

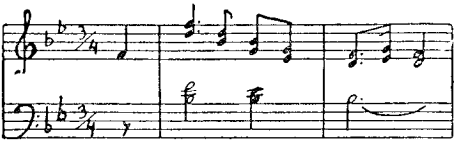
INT-SIG: Beromünster:
R. Basel: "Z'Basel a myn Rhy". (Music box).
R. Bern: "D'Zyt isch do" (Music box).



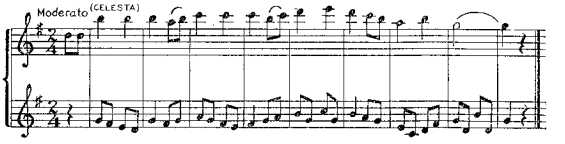
R. Zurich: "Chumm Bueb und lueg dis Ländli a". (Celeste)



Sottens: Radiodiffusion Suisse, Programme romand: Melody by



Achille Christen (Celesta):



ancient

Swedish Pastoral Music

is the latest LP of Swedish folk music issued by the Swedish Broadcasting Corp. – vocal herding calls and tunes played on birchbark and animal horn. Catalogue No. RELP 5017 – **cover text in English.**

The Folk Music of Sweden

An introductory pamphlet containing a list of other records of the Swedish folk music. Send for free copy.

SR

The Swedish Broadcasting Corporation
Publication Dept. Box 955 Stockholm 1.
SWEDEN

Monte Ceneri: "Campane della Chiesa di Pazzalino" (disk/records).

V. Any messages from our listeners and viewers are most welcome. Both QSL-card and letter are used – PUB: "Radio+Fernsehen". "Radio TV – Je vois tout". "Radiotivu" – FI: By licence fee – ALF: Frcs. 33,–.

FOREIGN SERVICES

Schwarzenburg (G.C. 07.24E/46.49N): 4×100kW & 2×250kW tr's (directional for overseas tr's) – **Beromünster** (G.C. 08.10E/47.12N): 2×250kW tr's (non-directional, European Prgr):

kc	m	kc	m	kc	m	kc	m
5965	50.29	9655	31.07	11810	25.40	17770	16.88
6045	49.63	9665	31.04	11865	25.28	17800	16.85
6120	49.02	9670	31.02	11880	25.25	17845	16.81
6165	48.66	9695	30.94	11965	25.07	21460	13.98
7220	41.55	11715	25.61	15130	19.83	21520	13.94
9535	31.46	11770	25.49	15305	19.60	21560	13.91
9595	31.27	11775	25.48	15320	19.58		

Schedules (6/11-66–6/5-67)

EUROPEAN SERVICE

Non-directional (covering Europe and No. Africa) on 6165kc (also on 9535kc W 09.00–15.00, Sun 06.45–13.00); **English** W 07.00–08.15 (for details, see "Prgr's in English"); **German-French-Italian** W 06.00–07.00, 08.15–23.00, Sun 06.45–23.00 – **N: English:** W 07.00; **German:** 06.00 (W), 06.50 (Sun), 11.30, 18.15, 22.30; **French:** 06.15 (W), 07.00 (Sun), 11.45, 19.15, 22.25; **Italian:** 06.30 (W), 07.15 (Sun), 12.15, 22.00 – **Esperanto:** 12.00 (Mon, Wed), 21.45 (Thurs, Sat). **Prgr's for Swiss Abroad:** W 08.15–08.45, D 12.30–13.00, 17.30–18.00 (French: Mon, Thurs; Swiss-German: Tues, Fri, Sun; Italian: Wed, Sat).

OVERSEAS SERVICE

I=Africa; II=UK/Ireland; III=Spain/Portugal; IV=Japan/F.East; V=Australia/N.Z./S.E.Asia; VI=India/Pakistan; VII=Near & Middle East; VIII=So.America; IX=Ce.America; X=No.America (East); XI=No.America (West); SA=For Swiss Abroad.

Times	kc	Areas	Languages
07.00–08.45	9670/11775/15320	IV	English/SA
09.00–10.45	15305/17800/21520	V	English/SA
09.00–13.00	17770/21460	I	English/Portuguese/German-French-Italian/SA
11.00–12.45	9665/11865	II	English/SA
13.00–14.45	15305/17845/21520	VI	English/SA
13.15–14.45	9665/11865	III	SA/Spanish
15.00–16.45	15130	XI	English/SA
15.00–17.15	9655/9665/11715/15305	VII	English/SA/Arabic
17.30–18.30	11880/15305/17770	I	Arabic/French
18.45–20.30	6045/7220	II	English/SA
20.45–22.45	7220/9665	III	Spanish/Portuguese/SA
23.00–01.00	6120/9595 9695/11965	VIII	Portuguese/SA/Spanish
01.15–03.00	5965/6120/9535	X	English/SA
03.15–04.45	6120/9535/9655	IX	Spanish/SA
05.00–06.45	5965	XI	English/SA

PRGR'S IN ENGLISH:

Each tr 75 min – All tr's begin with T.S. and N – Features: **Commentary or Weekly Review:** D – **Echoes from Switzerland:** W – **Daisy's Swiss Diary:** Mon – **Spotlight on Sports:** Tues – **The Story Teller:** Fri – **Swiss Vocalists:** Sat – **Swiss Conductors at Home and Abroad:** Mon – **Perspectives** (institutions and personalities in Swiss life): Tues – **Melody Train** (request prgr): Wed – **Swiss Gazette** (Life & People): Thurs – **Jazz Panorama:** Fri – **Swiss Shortwave Merry-Go-Round** (entertainment and inf. for SWLs, HAMs and DX-ers): Sat – **Swiss Sunday Special** (Bells of Switzerland, Religious Talk, Melody Train and Mailbag Show, Listeners' Quiz): Sun.

PRGR'S IN SPANISH:

Each tr 60 min – All tr's begin with T.S. and N – Features: **Comentario politico o La Semana en Suiza** (Commentary or Weekly Review): W – **El deporte** (Sports Roundup): Mon – **Pinceladas de actualidad** (Topical reports): Tues/Thurs/Sat – **Apuntes económicos** (Econ. Talks): Wed – **Actualidad femenina** (Feminine topics): Fri – **Suizos en el extranjero** (Swiss who settled abroad): Fri – **Miscelánea semanal** (Weekly magazine): Sun – **Música para todos** (Light music): Mon – **Directores de orquesta suizos** (Swiss conductors): Tues – **Mensajes musicales** (Request prgr): Wed/Sat – **Compositores suizos** (Swiss composers): Thurs – **Cantantes suizos** (Swiss vocalists): Fri – **Música popular suiza** (Swiss folk music): Sun.

PRGR'S IN PORTUGUESE:

Each tr 30 min – All tr's begin with T.S. and N – Features: **Actualidade Internacional** (World Topics): Mon/Wed/Thurs/Fri – **Caixa Postal 3000 Berna 16** (Mbg): Mon – **Economia em Foco** (Economic Notes): Tues – **Magazine:** Tues – **Musica Popular Suiça:** (Swiss Folk Music): Wed – **Arte e Cultura** (Arts in Sw'ld): Thurs – **Aguarela Musical** (Light music): Fri – **Tribuna Semanal** (Weekly Roundup): Sat – **Aqui Suiça** (Switzerland Calling) or **Cantinho do Ouvinte** (request prgr): Sun.

PRGR'S IN ARABIC:

Each tr 30 min – All tr's begin with T.S. and N – Features: **Magazine:** Mon, Fri – **Swiss partnership:** Tues – **African history:** Wed – **Swiss vocalists:** Thurs – **Musical requests:** Sat – **Arabic music and poetry:** Sun.

PRGR'S IN FRENCH (for Africa):

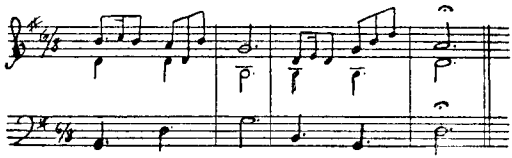
30 min, beginning with T.S. and N – Features: **Page de la vie du monde** (Polit. Comm): Mon–Fri – **Le monde cette semaine** (Weekly review): Sat – **Musique de ce temps** (Music of our time): Sun – **Problemes de notre temps** (Problems of our time): Mon – **Bonsoir l'Afrique** (Topical reports): Tues–Sat – **Boîte postale** (Mbg): Sun.

SUNSPOT NUMBERS: Reception and tr. times are as follows: 10th/11th Dec, 7th/8th Jan, 4th/5th Feb, 4th/5th March, 8th/9th April, 6th/7th May.

In English (during last 5 min of "Swiss Shortwave Merry-Go-Round"): Sat 08.05(IV), 10.05(V+I), 12.05(II), 14.05(VI); 16.05(VII+XI), 19.50(II); Sun 02.20(X), 06.05(XI).

Im Spanish (right after the prgr "Mensajes Musicales"): Sat 14.40(III), 21.40(III); Sun 00.55(VIII), 04.10(IX).

INT-SIG: "Luegit vo Bärg und Tal" (trad. German-Swiss folk song), played on music-box.



V. Correct reports to SBC European & Overseas Service, CH 3000 Bern 16, Switzerland, verified by QSL-card or letter. IRC if airmail reply required – PUB: Prgr.schedule "Switzerland Calling" (twice a year, spring and autumn, also in German, French, Spanish, Portuguese and Arabic); report cards and report sheets (airletters) free upon request. No DX-Club, no pennants, no pen-pals.

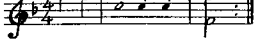
UNITED NATIONS BROADCASTING FROM GENEVA

ADDR: R. des Nations Unies, Palais des Nations, Geneva. **Cable:** Omnipress. **Te:** 346011. Ext. 2315/2566 – **L.P:** Dir. Inf: J. G. Lindström. Chief R. Operations: R. Nivelle.

FOREIGN SCE: 7443kc 40.31m 25kW: Prgr. in **Russian** Fri 18.30–18.40. UN Prgr. in **Arabic** (to No. Africa/Mid. East) Mon 17.55–18.00 on 15385/11810/9575kc (via RAI) & Fri 11.15–11.30 on 17740/21620kc (via ORTF). "Le Tour du Monde des Nations Unies" (30 min's) over Sottens 21.55 at mid month then by transcription to 39 diff. countries which broadc. in French.

ANN: E: "This is the United Nations R. in Geneve". F: "Ici les Nations Unies à Genève".

INT-SIG:



V. by QSL-card or letter.

BROADCAST FROM THE INTERNATIONAL COMMITTEE OF THE RED CROSS, GENEVA

ADDR: Int. Comm. of the Red Cross, 7, Ave. de la Paix, 1211 Geneva 1 – **L.P:** Dir. P. Basset.

In Peace time: ICRC organizes occasional test transmissions (6 times a year) on the frequency of 7210kc 41.61m by courtesy of Swiss Short Wave Service at the following hrs: 06.00–07.00, repeated at 11.30–12.30, 15.00–16.00, 21.00–22.00 in **French, German, Italian, English, Spanish, Arabic** – Prgr's consist of ICRC-actualities and tracing service. **In Times of Crisis:** ICRC broadcastst programmes containing information regarding prisoners of war and civilians on the same frequency as well as on others lent by the Swiss authorities, up to 12 hours per day – **ANN: Arabic:** "Huna Geneve". E: "This is R. Inter-Red-Cross calling". F: "Ici R. Inter-Croix-Rouge". G: "Hier is R. Inter-Rot-Kreuz". I: "Qui R. Inter-Cruce-Rossa". Sp: "Aqui R. Inter-Cruz-Roja". V. by QSL-card. Recordings accepted.

Habla Suiza

Hier Schweiz

Aqui Suíça

Switzerland Calling

هنا سويسرا

Qui la Svizzera

Ici la Suisse

Svislando vokas

European and Overseas Services of the Swiss Broadcasting Corporation

On the air to the world in English, German, French, Italian, Spanish, Portuguese, Arabic and Esperanto: World and home news, political commentaries – Documentary and entertainment features – Serious, light and Swiss country music concerts – Special programmes for DX-ers and jazz fans.

+SBC

Write in for your free copy of "Switzerland Calling", SBC's illustrated programme schedule, published in spring and autumn:
SBC European and Overseas Services, CH 3000 Bern 16, Switzerland

U.S.S.R.

L.T: See time table – Pr.L: Russian, Ukrainian, Byelorussian, Uzbek Tatar, Kazakh, Azerbaidjanian, Armenian, Georgian, Lithuanian, Moldavian, German, Estonian, Latvian, Chuvash, Tadjik.

STATE COMMITTEE FOR BROADCASTING AND TELEVISION (Gov.)

ADDR: *Pjatnitskaja ulitza 25, Moscow. Cable: Moskva Radio. Te:* 33-63-56 – L.P: Pres. of Broadc. Committee. N. N. Mesyatsev. 1st Vice-Pres: E. N. Mamedov. Vice-Pres. (TV): G. A. Ivanov. Vice Pres. (Radio): A. A. Rapokhin. Vice Pres (Constr): L. S. Maksakov. Dir. Tec. (Radio): V. F. Zjelesova. Chief Foreign Relations: M. Monusov.

STATIONS:

LONG & MEDIUM WAVES:

Station	kc	m	kW	H of tr.
Moscow 1 (RSFSR)	151	1987	50	02.00–22.00 (Sat/Sun 23.00)
Petropavlovsk (RSFSR)	155	1935	10	20.00–11.00
Tashkent (Uzbekistan)	164	1829	50	00.00–19.30
Moscow II (RSFSR)	173	1734	500	02.00–01.00 2 prgr.
Chita (RSFSR)	173	1734	20	21.00–16.00
Alma-Ata (Kazakhstan)	182	1648	50	00.00–20.00
Kamchatka (RSFSR)	182	1648		18.30–13.00
Tbilisi (Georgia)	191	1571	50	01.55–10.00, 13.00–21.03
Irkutsk (RSFSR)	200	1500	100	22.00–19.00
Moscow III (RSFSR)	200	1500	100	06.00–13.30
Kiev I (Ukraine)	209	1435	150	02.00–10.00, 13.00–22.00
Baku (Azerbaijan)	218	1376	50	02.00–10.00, 13.00–22.00
Krasnoyarsk (RSFSR)	218	1376	50	23.00–18.00
Tselinograd (Kazakhstan)	227	1322	50	as 182kc
Leningrad I (RSFSR)	236	1271	100	as 151kc (1. prgr.)
Magadan (RSFSR)	236	1271	20	18.00–13.00
Vladivostok (RSFSR)	245	1224	100	21.00–01.00, 08.00–16.30
Dushanbé (Tadjikistan)	254	1181	50	00.00–21.00
Kazan (Tatar ASSR)	254	1181	100	02.00–14.00
Yakutsk (Yakutsk ASSR)	263	1141	10	21.00–16.00
Moscow I (RSFSR)	263	1141	150	02.00–22.00, 02.00–22.00
Novosibirsk (RSFSR)	272	1103	100	23.00–21.00
Minsk II (Byelorussia)	281	1068	100	02.00–22.00
Ulan-Ude (Buryat ASSR)	281	1068	10	22.00–17.00
Khabarovsk (RSFSR)	335	896	150	19.30–10.45
Saratov (RSFSR)	340	882.4	100	02.00–07.00, 16.00–22.00 (2. prgr.)
Yuzno-Sakhal. (RSFSR)	360	883	100	19.25–21.45, 01.00–11.30
Yerevan (Armenia)	362	828.7	50	02.00–11.30, 13.00–22.00
Ashkhabad (Turkmenia)	375	800	10	02.00–11.00, 13.00–21.00
Arkhangelsk (RSFSR)	380	789	50	20.00–14.00 (4th prgr.)
Kharkov (Ukraine)	385	779	50	15.00–22.00 (2.+3. prgr.) Sun 06.00–12.00 (R. Kiev)
Omsk (RSFSR)	390	769	50	00.00–06.00, 10.00–15.00
Moscow IV (RSFSR)	395	759.5	100	19.00–07.00, 08.00–15.00 (2.+4. prgr.)
Tashkent II (Uzbekistan)	400	750	50	00.00–21.03
Minsk II (Byelorussia)	400	750	50	02.00–12.00, 15.00–23.30
Odessa (Ukraine)	548	547	100	03.00–22.00 (2. prgr)
Vladivostok (RSFSR)	548	547	100	08.00–16.00, 21.00–23.00
Volgograd (RSFSR)	557	539	10	02.00–21.00
Riga I (Latvia)	575	521.7	100	03.00–23.00
Astrakhan (RSFSR)	593	505	10	23.00–22.00
Frunze (Kirghizia)	611	491	25	00.00–20.00
Petrozavodsk (Kar. ASSR)	611	491	100	02.30–09.20, 11.00–22.00
Krasnodar (RSFSR)	611	491	20	
Vladivostok (RSFSR)	629	476.9	100	08.00–15.30, 21.00–22.00
Simferopol (Ukraine)	647	464	100	02.00–12.00, 13.00–22.00
Murmansk (RSFSR)	656	457.3	150	02.00–22.00
Vilnius (Lithaunia)	665	451.1	100	02.00–22.00
Tsjernovtsy (Ukraine)	674	445.1	100	03.00–12.00, 13.45–22.00
Ufa (Bashkir ASSR)	692	433.5	100	01.00–12.00, 14.30–21.00
Donetsk (Ukraine)	710	422.5	150	02.00–12.00, 13.00–22.00
Tallinn (Estonia)	710	422.5	150	03.00–23.00
Chelyabinsk (RSFSR)	737	407.1	10	01.00–20.00
Moscow II (RSFSR)	737	407.1	20	06.00–12.00, 16.00–20.30
Tselinograd (Kazakhstan)	746	402	20	00.00–21.03
Odessa (Ukraine)	764	392.7	10	01.55–12.00
Kiev II (Ukraine)	782	383.6	100	02.00–12.00, 13.00–15.30
Karaganda (Kazakhstan)	782	383.6	20	00.00–21.03
Leningrad II	800	375	100	03.00–22.00
Dushanbé (Tadjikistan)	800	375	100	08.00–18.30, 08.00–18.30
Kuibyshev (RSFSR)	809	371	10	02.00–13.00, 15.00–22.00
Gorkij (RSFSR) 2. prgr.	827	363	20	03.00–22.00
Kharkov (Ukraine)	836	358	20	16.00–22.00
Kazan (Tatar ASSR)	845	355	10	03.00–11.00, 13.00–22.00
Yerevan (Armenia)	863	347.6	100	02.00–11.00, 11.50–22.05
Moscow (RSFSR)	872	344	150	04.00–03.00 (2.+3. prgr)
Stavropol (RSFSR)	881	340	20	02.00–22.00
Ushgorod (Ukraine)	890	337.1	50	02.00–12.00, 13.00–22.00
Makhachkala (Dhagestan)	917	327.2	50	02.00–22.00
Lvov (Ukraine)	935	320.9	300	02.00–12.00, 13.00–01.00
Voronej	944	318	20	
Smolensk (RSFSR)	971	309	150	07.00–16.00 (1st prgr.) 16.00–21.30
Yuzhno-Sakhal. (RSFSR)	973	308	20	19.25–21.45, 01.00–13.05
Kishinjov (Moldavia)	998	300.6	100	03.00–11.00, 12.00–23.00
Baku (Azerbajan)	1016	295.3	100	14.00–20.00, 01.55–10.00
Tomsk (RSFSR)	1025	292.7	200	03.00–22.00 (1st prgr.)
Tallinn I (Estonia)	1034	290.1	100	03.00–22.00
Tbilisi (Georgia)	1043	287.6	100	02.00–21.00
Dnjepropetrovsk(Ukraine)	1070	280.4	20	03.00–12.00, 13.00–22.00
Perm	1088	275.5	20	01.00–21.03
Vilnius II (Lithuania)	1106	271.2	100	04.00–21.00
Kaliningrad (RSFSR)	1115	269.1	20	02.00–22.00 (1. prgr)
Leningrad III (Vyborg)	1124	266.9	20	03.00–22.00
Moscow II (RSFSR)	1142	262.7	50	03.00–22.00 (2. prgr)
Vladivostok (RSFSR)	1151	260.9	100	08.00–14.30
Kiev (Ukraine)	1169	256.6	150	02.00–15.30 (1. prgr) 15.30–00.30
Kursk (RSFSR)	1214	247.1	20	
Tallinn II (Estonia)	1214	247.1	20	02.55(Sun 03.25)–23.00
Odessa (Ukraine)	1241	241.7	50	16.00–24.00
Khabarovsk (RSFSR)	1250	240	100	21.00–09.30 (2. prgr) 09.30–16.00
Moscow III	1277	234.9	20	04.00–03.00
Simferopol (Ukraine)	1313	228.5	50	16.30–24.00
Kharkov (Ukraine)	1322	226.9	100	
Kohtla Järve (Estonia)	1331	225.4	20	02.55(Sun 03.55)–21.03
Pärnu (Estonia)	1331	225.4	20	
Kuldiga (Latvia)	1349	222.4	20	
Madona (Latvia)	1349	222.4	20	03.00–21.03, 21.05–22.00
Valmiera (Latvia)	1349	222.4	20	
Moscow II	1367	219.5		03.00–22.00 (2. prgr)
Kiev III (Ukraine)	1376	218.2	50	16.00–22.00
Kaunas (Lithuania)	1385	216.6	150	05.00–15.00 (3. prgr) 16.00–22.30
Orissare (Estonia)	1403	213.8	10	02.55(Sun 03.25)–21.03
Tartu (Estonia)	1403	213.8	20	
Kiev III (Ukraine)	1403	213.8	10	16.00–22.00
Riga (Latvia)	1421	211.1	10	03.00–22.00 (Sat/Sun 23.00)
Riga III (Latvia)	1484	202.2	5	03.00–22.00
Leningrad (RSFSR)	1493	200.9	50	16.30–00.30
Gomel (Ukraine)	1493	200.9	20	02.00–11.00
Vinnitsa (Ukraine)	1546	194	50	15.30–21.30
Baranovitchi (Byelorussia)	1554	193	20	04.00–21.00
Turi (Lithuania)	1554	193		04.00–23.00
Moscow II	1570	191.1	10	03.00–11.00

Shortwaves: For R. Moscow and Regional shortwave st's: please refer to the pages: Short Wave Stations of the World.

HOME SERVICES

First Prgr: 02.00–22.00 on 173, 263, 1115, 1466kc and 49mb (5910–6165kc) & 41mb (7100–7420kc); On 236kc: 02.00–11.00 & 12.00–22.00 (Sat/Sun 02.00–22.00); On 935kc: W 17.00–21.00, Sun 07.00–16.00; On 971kc: 06.15–16.00(Sun); In 31mb (9470–9800kc): 03.00–21.00. In 25mb (11630–12070kc): 03.00–17.00.
D.Prgr: N: 02.02, 03.03, 05.00, 09.00(W), 14.00(Mon–Fri), 15.00, 20.50 – **Press review:** 04.00(Pravda), 06.00(Central press) – **Prgr. preview:** 04.35, 05.10, 09.10, 10.50 (for coming day) – **LL:** 13.15(Fri) English; 13.50: Tues German, Wed French – **Youth Prgr. (Yunost):** 12.00–13.00(Sat/Sun 14.00–15.00), 19.30–20,00. 20.15–20.50 (D. exc. Sat) – **Concert:** 03.30(Sun 02.30), 21.03.
Special prgr on 263kc: 08.30–09.00, 17.00–18.00.

Second Prgr ("Majak"-Lighthouse): 24h in 49 (5900–6200kc), 41 (7100-7350kc), 31 (9470–9800kc) & 25 mb (11700–12060kc).
On 151kc: 02.00–15.00; On 200kc: 06.00–13.00; On 340kc: 16.00–22.00; On 385/773kc: 15.00–22.00; On 398kc: 19.00–08.00; On 400kc: 15.00–23.30; On 548/1142kc: 03.00–22.00; On 593kc: 23.00–22.00; On 693kc: 15.00–21,00; On 737kc: 15.00–20.00; On 809kc: 02.00–22.00; On 827kc: 03.00–14.00 & 15.00–22.00; On 872kc: 01.00–04.00 & 20.00–22.00; On 1250kc: 21.00–09.30; On 1277kc: 20.00–03.00.
N: each full h – **Comm, interview, reportage, press review:** each half h.

Third Prgr: 04.00–20.00 on 872/1277/4055kc; On 693/737kc: 06.00–12.00. On 1367kc: 04.00–13.00(Sun 07.00); On 1385kc: 04.00–15.00; On 4055/9565/9795kc: 04.00–20.00; In 49 mb (6065–6100kc): 04.00–14.00; In 41, 25 mb (7125–7380kc & 11570–11945kc): 04.00–20.00.

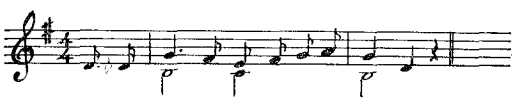
4th Prgr (for East Siberia/Far East): 19.00–15.00. On 155kc: 19.00–08.00; On 380kc: 20.00–14.00. On 398kc: 08.00–15.00; In 49 mb (6035–6190kc): 19.00–21.40, 09.30–15.00; In 41 mb (7305–7440kc): 19.00–02.00, 07.00–15.00; In 31 mb (9480–9770kc): 19.00–10.00,

13.30–15.00; In 25 mb (11740–12060kc): 19.00–20.30, 23.00–15.00. N: each full h.
5th Prgr (for West Siberia): 23.00–19.00. On 272/4430kc: 23.00–19.00; On 395kc: 00.00–19.00; In 41 mb (7195–7330kc): 23.00–05.30, 15.00–19.00; In 31 mb (9375–9605kc): 23.00–19.00; On 11720/11915kc: 04.00–15.00.

Special Prgr's in German for Ural, Siberia, Ce. Asia, Altai: D. 01.20–02.00 on 692kc (Ufa), 737kc (Chelyabinsk) and in 31 m.b. (winter 41 m.b.); Mon–Fri 12.00–12.20 on 227kc (for Kazakhstan & We. Siberia) and in 25 m.b. (for Siberia, Altai, Far East)+31 m.b. (for Ural, Ce. Asia).

ANN: R: "Govorit (name of station: Moskva, Alma-Ata, Baku, Leningrad, Tashkent etc)". G: (R. Moscow): "Hier ist Moskau mit seiner Sendung für die Sowjetdeutsche Bevölkerung".

INT-SIG: For Home & Foreign Service:



PUB: "Radioprogrammy" (weekly) and "Televidenye" (weekly).

REGIONAL STATIONS

R. ALMA-ATA – L.P: Pres: K. N. Shabalayev.
1st Prgr. in Kazakh, Russian, German, Uighurs: 00.00–13.00 on 182/227/746/782/4544/5260/6180/9250/9380/10530kc (01.00–02.00 not on 9250/6180kc), 13.00–21.03 on 182/5260/6180/9380/10530 (only until 19.00) kc. N: Kazakh: 00.03, 02.00, 07.25, 10.30(W), 14.00(W), 12.30(Sun). Russian: 00.06, 02.07, 07.35, 12.40(Sun), 14.10(W) – **Wrp:** 01.35, 10.38(W) – **Kazakh music:** 04.10, 09.10, 13.00 – **Concert:** 05.15, 07.00, 07.40 – **German:** (N & Prgr): Wed, Fri 10.10–10.40, Tues, Sat 11.30–12.00 – **Uighurs** (N & Prgr): Mon, Wed, Fri 11.30–12.00.
Rel. R. Moscow: 00.30(Sun 01.00)–01.30, 03.00–03.15, 04.00–04.15 (Press), 04.40–05.20, 06.00–06.30, 09.00–10.00, 11.00–11.30(Sun 12.00), 12.00–13.00, 14.00–15.00(Sun), 15.00–16.00, 17.00(Sat 18.00)–21.03 (incl. N from Moscow: 01.00, 03.02, 05.00, 09.00(W), 15.00, 19.00).
Prgr for farmers: 01.00–02.00 on 227/9250/6180kc in Kazakh. N: 01.00, 16.00–17.00(Sat 18.00) on 182/5260/6180/9380/10530kc: Kazakh: 16.00–16.30; Russian: 16.30–17.00.
2nd Prgr (Cult) in Kazakh: 13.00–18.00 on 746/4544/9250kc: N: 13.00, 14.30, 15.00, 16.00.

ANN: Kazakh: "Almatydan söilep turmys". Russian: "Govorit Alma-Ata". German: "Hier ist Alma-Ata mit seiner Sendung für die deutsche Bevölkerung in Kasachstan" – **INT-SIG**: Kazakh folk song

R. ARKHANGELSK in Russian, Saami: 1st Prgr: 02.00–11.00 on 5930kc; 13.00–21.03 on 5015kc. **Own Prgr's:** D 05.14–05.55, 14.30–15.00, 16.00–16.55. N: 05.40, 14.45, 16.00 – **Reg. Press review:** 05.15. Other times rel. R. Moscow.
2nd Prgr: 03.00–20.00 on 66.0Mc (rel. R. Moscow II). **Own Prgr's:** 05.45–07.00, 16.00–20.00.

R. ASHKHABAD – L.P: Pres: Y. Khodshayev.
In Turkmenian, Russian: 00.55–09.00, 13.00–22.00 on 375/4825kc – **Turkmenian:** 01.00–03.00, 03.15–04.00, 04.15–05.40, 07.00–08.00, 13.00–15.00, 16.00–18.00 – **N:** 01.00, 02.00, 13.00, 15.30 – **Rel. R. Moscow:** 02.15–03.15, 05.40–07.00, 08.00–09.00, 15.00–15.30, 18.00–22.00(incl. N at 03.03, 15.00, 19.00) – **ANN:** Turkmenian "Gepleyär Ashkhabad".

R. BAKU: In Azerbaidjan, Russian, Armenian:
1st Prgr: D 01.55–11.00, 12.30–22.00 on 218/4958kc, 01.55–04.00, 05.00–11.00 also on 9490kc.
N: Azerbaidjan: 02.00, 09.00, 12.30, 15.00, 18.00. **N in Russian:** 06.45, 16.10, 18.15.
Prgr. in Armenian: 07.15–08.00. **N:** (Rel. R. Yerevan) 15.40 – **Rel. R. Moscow:** 03.00–04.00, 04.45–06.00, 09.30–11.00, 19.00–19.30, 20.00–22.00 (incl. N: 03.02, 19.00, 21.03).
2nd Prgr: On 4958kc 14.00–20.00 – **ANN:** Azerbaidjan (Home & Foreign Sce): "Danishir Baku".

R. BARNAUL (Altai):
1st Prgr: 00.00–17.00 on 310kc/FM – **Own Prgr's:** 01.10–02.00, 12.00–14.00. **German** (for Kulunda-Zone): Wed 13.20–13.43 – Other times rel. R. Moscow.

R. CHELYABINSK: In Russian, Bashkirian, German: 1st Prgr: On 737kc: 00.55–12.00, 12.30–21.03. **Own Prgr's:** 02.00–03.00, 03.30–06.00, 14.00–16.00 – **N: Russian:** 02.00, 14.00. **Bashkirian:** 03.30, 15.30 – **Rel. R. Moscow:** 01.00–02.00, 03.00–03.30, 06.00–12.00, 16.00–21.00 (2nd Prgr. incl. N. at 01.00, 03.03, 06.00, 07.00, 08.00, 09.00, 10.00, 11.00, 16.00, 17.00, 18.00, 19.00) – **German:** 01.20–02.00 (N, Prgr).

R. DUSHANBE – ADDR: Gorod Dushanbe, ul. Ordzonikidee 7, Tadjik SSR – **L.P:** Pres: V. Sharipov.
1st Prgr: 00.00–21.03 on 254/4635kc in Tajik, Russian, Uzbec. **N. in Tajik:** 00.04, 05.50, 11.50, 16.00, 17.00. **N. in Russian:** 04.45, 14.00. **N. in Uzbec:** 13.00 – **Rel. Moscow:** 00.30–01.00, 02.00–02.15, 03.00–03.15, 04.00–04.10, 05.00–05.15, 06.00–08.00, 09.00–10.00(Sun 10.30), 11.00–12.00, 15.00–15.50(Thurs, Fri, Sat 15.30, Sun 15.20), 18.00–21.00 – **2nd Prgr:** 08.00–13.30 on 800/4975kc. **Own Prgr:** 09.00–10.10, 10.25–11.30, 12.00–13.30. N: 09.05.
ANN: Tadjik: "Insto Dushanbé". Russian: "Govorit Dushanbé".

R. FRUNZE: L.P: Pres: A. U. Botokhanova – **1st Prgr: In Kirghize, Russian, German:** On 611/4008kc: Mon–Fri 00.00–09.35, 11.00–21.03; Sat/Sun 00.00–21.03. **N: (Kirghize & Russian):** 01.00, 08.00, 13.00 – **Press review:** 02.25, 03.30(Sun), 06.00, 09.20 – **Folklore:** 00.05 – **German:** Tues 03.45–04.00, Sat 10.40–11.00 – **Rel. R. Moscow:** 01.20–02.15, 05.45–06.15, 11.30–12.30, 17.00–21.03 – N: (R. Moscow): 00.30, 02.00, 03.00, 04.00 (Press), 05.00, 15.00, 16.00, 17.00 – ANN: "Govorit Frunze", "Hier ist Frunse".

R. KALININGRAD 1st Prgr: 1115kc/66.0Mc: 02.00–22.00. **Own Prgr's:** D 05.11–06.00, W 11.10–11.30, Sun 10.00–11.00, 14.01–15.00 (Tues, Thurs, Sat, Sun), 15.30–17.00(Mon, Wed, Fri). N: 05.15, 12.45 (navigation N), 14.30 or 15.30. Other times Rel. R. Moscow II – **2nd Prgr:** 14.00–21.00 on FM only – **Special Prgr. for seamen in Baltic Sea & No. Atlantic** on 1385kc: Sun 00.05–01.40.

R. KIEV – ADDR: Ukrainske Radio, R. Centre, ul. Khreshchatik 24, Kiev, Ukrainian SSR – **L.P:** Pres: N. Skatjko.
In Ukrainian, Russian: 1st Prgr: W 01.55–12.00 (12.00–12.30 on 209kc only), 13.00–22.00. Sun 01.55–22.00 on 209/647/674/710kc; 03.55–13.00(Sun 06.00) on 4940kc; 05.30–11.30 on 6020kc; 01.55–12.00 on 782kc.
Own prgr's in Ukrainian: 03.45–04.00, 05.00–06.00, 06.15–07.00, 08.10–10.50, 12.55–15.00, 16.00–19.00. N: 05.00, 07.30, 09.00, 10.00 (dictation on 209kc only), 13.30(local), 18.00 – **Wrp:** 03.55, 07.50, 13.10, 18.10 – **N. in Russian:** 08.00 – **Rel. R. Moscow:** 02.00–03.45 07.00–08.10, 10.50–12.00, 15.00–16.00, 19.00–22.00(incl. N from Moscow 02.02, 04.00(Press), 06.00(Press), 15.00, 19.00, 20.50).
2nd Prgr: 13.00–22.00 on 764 kc; 07.00–08.00, 13.00–14.00, 15.00–15.35 on 782kc; 13.00–16.00 on 4940kc; 15.00–16.00 on 6020/7210kc.
Special Prgr. for Students: 15.00–16.00 – **L.L:** 15.00–15.35 English (Sat), German (Thurs).
Prgr. "Promyn" (Music & Inf in Ukrainian): Sun 06.00–22.00, W 16.00–22.00 on 4940kc, 16.00(Sun 13.00)–22.00 on 836/1376kc; Sun 06.00–15.30 on 782kc (also 385kc until 12.00), 16.00–22.00 also on 1241/1403kc – **ANN:** (Home & Foreign Sce): "Hovorit Kiyiv".

R. KISHINEV – L.P: Pres: I. Dobanda.
In Moldavian, Russian: 03.00–23.00 on 998kc. **Own Prgr's:** 03.15–04.00, 04.30–06.00, 07.30–11.00, 12.44–14.00, 17.00–19.00.
R. Moscow: 04.00–04.30, 14.00–17.00 (incl. N. at 04.00, 15.00) – **ANN:** "Vorbeste Chisinau" (Moldavian), "Govorit Kishinev".

R. LENINGRAD – In Russian:
1st Prgr: 02.00–22.00 on 800/11700kc+FM.
2nd Prgr: 02.57–12.00, 13.00–23.00 on 1124kc+FM. **Own Prgr:** 03.30–04.00 (also on 800kc), 05.10–06.00. N: 03.30. **Wrp:** 02.57, 03.45, 05.15 – Other times rel. R. Moscow.
Special Prgr. (for seamen in Baltic Sea & No. Atlantic) fortnightly: Fri/Sat 23.55–01.55 on 800kc, Sat 08.00–09.00 in 25, 19, 16, 13m.b.

R. MINSK (in Bielorussian): HOME SCE: 1st Prgr: On 281kc: 02.00–23.00. **Own Prgr's:** 03.30–04.00, 04.15–06.00, 06.00–08.00, 08.30–09.00, 10.00–12.00(W), 13.00–15.00, 15.30–18.00, 18.00–19.00 (W), 19.30–20.00. N: 03.35, 05.00, 06.00, 10.00*(W), 13.00, 17.30 – **Rel. R. Moscow:** 02.00–03.30, 04.00–04.15, 08.00–08.30, 09.00–10.00, 20.00–23.00(incl. N. at 02.03, 08.00, 21.03, 22.00, 22.55) – **2nd Prgr:** On 400kc: 02.00–12.00, 12.30–22.00 (rel. R. Moscow exc. 09.00–10.00, 20.00–21.00 when own prgr's). *=281kc only.
ANN: (Bielorussian) "Havoryts Minsk".

R. OMSK on 395kc: 00.00–19.00 – **Own Prgr's: Russian:** 01.10–02.00, 04.10–05.00, 12.00–12.30 – **German:** Tues, Sat 04.20–04.40 – Other times: Rel. R. Moscow.

R. RIGA – ADDR: Latvijas Radioraidijumu un televizijas Komiteja P.O. Box 266, Riga. **Cable:** "Latradio". **Home Sce. in Latvian, Russian: 1st Prgr: On 575/1349kc+FM:** 03.00–22.00(Sat/Sun 23.00), from 21.03 also on 1421kc. **N. in Latvian:** 03.17, 05.00, 07.00(W), 09.00(W), 10.45(W), 13.00(W), 18.00, 20.50 – **Press review:** 05.35 – **Concert:** 05.15, 09.40(W), 21.03 – **Folklore:** 03.30 – **Prgr. preview:** 14.05 (Sun 14.55) – **Russian:** Wed 03.40, Sat 11.00–11.30, Sun 14.00–14.30, Thurs 13.00–14.00, Tues 16.15–17.00. Other times **Rel. R. Moscow:** 03.00–03.15(N), 04.00–04.10(N), W 05.45–06.15 (Sun 06.00–07.00), W 08.00–09.00, 11.30–13.00.
2nd Prgr: On 1421/1484kc: 03.00–21.03; On 1484kc+FM: 21.03–22.00(Sat/Sun 23.00): Rel. R. Moscow – **Own Prgr's:** 03.00–13.00 –

Russian: Sun, Mon 06.45; Wed, Thurs 08.10–09.00; W 12.00–13.00 – **N:** 08.00–08.10(W) – Other times rel. R. Moscow.
ANN: Latvian: "Runa Riga" – **PUB:** "Rigas Vilni" (weekly).

R. TALLINN – ADDR: Eesti Raadio ja Televisioon. Postkast 402, Tallinn. **Te:** 1201. **Cable:** "Estradio" – **L.P:** Pres: E. Jaanimägi. Vice Pres: U. Koit.
1st Prgr: 02.55(Sun 03.25)–21.03.
Estonian: W 02.55–09.15, 10.00–16.00; Sun 03.25–08.00, 09.15–16.00; D 16.30–21.03 on 1034/6085kc; W 02.55–05.45, 06.00(Fri 07.00)–14.00, 15.00–21.03; Sun 03.25–08.30, 10.00–21.03 also on 1331/1403kc **N:** 03.05(W), 03.35(Sun), 04.30(W), 05.00(exc. Mon), 07.00(W), 08.00(W), 10.00(W), 12.00, 13.00(W), 15.00(W), 16.30, 18.00, 20.00. **Rel. R. Moscow I:** D 04.00–04.10(Press); W 06.00–06.10, 09.00–10.00 (N & Prgr), 11.00–12.00(Prgr); D 20.50–21.00(N) – **Concert:** 08.15–08.40(W), 14.00–14.30(W), 16.40–17.00.
2nd Prgr: 03.00–23.00 on FM only.
3rd Prgr. in Russian: Own prgr's on 710/1331/1403kc+FM: W 05.45–06.00(Fri 07.00), 14.00–15.00; Sun 08.30–10.00 – **N:** 14.00(W).
Rel. R. Moscow I: 03.00–14.00, 15.00–15.30 on 710kc; 16.00–22.00 on 1214kc (incl. N at 03.02, 05.00, 09.00, 15.00, 19.00, 20.50). – **ANN:** "Siin Tallinn" (Estonian) – **PUB:** "Raadio leht" (weekly).

R. TASHKENT: ADDR: Uzbek Radio, ul. Khorezmskaya 49, Tashkent. – **L.P:** Pres: U. Y. Ibragimov.
In Uzbek, Tadjik, Russian, Uighur, Kazakh, Tatar:
1st Prgr: 00.00–09.00, 10.00–18.00 (18.00–20.00 rel. Moscow) on 164/5925kc – **N: Uzbek:** 00.03, 02.10, 07.50, 13.00, 17.00. **Kazakh** 15.50. **Tadjik** 03.50, 13.50. **Tatar:** Thurs, Sun 03.55 – **Prgr. in Uighur:** 14.30–15.00, 15.30–16.00 – **Folk music:** Karakalpak (Tues), Kazakh (Wed), Tatar (Mon, Thurs) all at 13.20–13.50 – **N.** (from R. Moscow): 01.00, 02.00, 03.00, 04.00, 05.00, 06.00, 09.00, 15.00, 18.00(W) –
2nd Prgr. (in Uzbek, Tadjik, Russian) on 400kc: 03.15–03.30, 13.00–16.00. **N:** 14.00 – **Prgr. in Tadjik:** 15.00–15.30.
ANN: Uzbek: "Tashkentdan gapiramis" – **INT-SIG:** see Foreign Sce.

R. TBILISI – L.P: Pres: P. Yu Shamotava.
In Georgian, Russian, Adshar, Osset: On 191/5040kc: 01.58–10.00, 14.00–21.03 – **Own Prgr's:** 02.00–03.00, 03.30–04.00, 04.20–10.00, 14.00–15.00, 16.00–20.00 – **N** (Grusian): 02.03, 05.00, 14.00, 16.00, 19.35 – **Prgr. in Russian:** 03.30–04.00, 14.30–15.00 – Other times rel. R. Moscow – **ANN:** Georgian: "Laparakops Tbilissi".

R. TSELINOGRAD (Kazakhstan).
Home Sce. in Russian, Kazakh, German on 227/782kc: 00.00–21.03. Own prgr's: D 01.45–02.00 (N, Press review), 02.15–03.00, 12.00–14.00 (N, prgr) – **German:** Sat 12.00–12.30 (N, prgr); Wed, Fri 04.10–04.40, Tues, Sat 11.30–12.00 (R. Alma-Ata); Mon-Fri 12.00–12.20(Fri –12.30) (R. Moscow) – Other times rel. Alma-Ata – **ANN:** (G): "Hier ist Zelinograd. Hören Sie unsere Sendung für die deutsche Bevölkerung der Neulandregion!"

R. VILNUS – ADDR: Lietuvos TSR Radijas, Kanarskio g-ve 49, Vilnius. – **1st Prgr. (Lithuanian):** On 665kc: 03.55–21.00. **N:** 04.00, **2nd Prgr. in Lithuanian, Polish, Russian:** On 1106/1554kc: 03.55–21.00. **N:** 14.00, 19.30 – **Polish:** 18.30–19.00 – **Russian:** 15.25–16.00.
ANN: Lithuanian: "Kalba Vinius". Polish: "Tu Vilnius".

R. YEREVAN – ADDR: Armenian Radio. Mravian st. 5, Yerevan 25. **Te:** 25272 – **L.P:** Dir. Gen: J. K. Kossian. Dir Tec: A. Blkvan.
1st Prgr. in Armenian, Azerbaidjan, Russian: 02.00–22.00.
On 362/4040kc: 02.00–11.30(Sat 12.20), 12.58–22.00; On 863/5740kc: 02.00–09.15(Sun 11.40); On FM only: 11.30–12.30; On 362/4040/FM only: 13.35–14.25.
N. in Armenian: 03.20, 08.10, 10.30, 13.00, 15.55, 18.30, 19.53 – **Azerbaidjan:** 14.25–14.30(N); 04.40–05.00(Fri) – **Russian:** 07.25–07.30 (N), 15.25–15.45(Wed). – **Prgr. for Azerbaidjani & Gruzian workers:** Sun 11.00–11.40–**Folklore:** 03.15, 10.00(W) – **Press review:** 04.30 (Sovietakan Ayastan) 05.15, (Kommunist, Soviet Ermanistany), 14.30 (Pravda) – **Prgr. preview:** 03.50, 10.35, 14.05 – **Rel. R. Moscow:** 02.00–02.33, 03.00(N), 04.00 (Press), 05.00(N), 06.00–07.30(Press, prgr), 09.00–10.00(N, prgr), 15.00–15.30(N), 19.00–19.30(N), 20.00–22.00(N: 21.00).
2nd Prgr. in Armenian, Azerbaidjan, Kurdish, Russian: 863/5740kc: 10.30–14.20 – On 7270kc: 10.30–19.00. On 7540kc: 16.30–1855. 10.30–18.55 on FM – **Armenian:** 10.30–12.10, 16.30–18.55, **N:** 16.31 – **Azerbaidjan:** 13.10–13.50 – **Kurdish:** 12.10–13.10, 13.50–14.20. **N:** 12.10, 13.50 – **Russian:** 12.00–12.10 (Thurs, Mon).

3rd Prgr. in Armenian: (cultural): 11.00–12.50 on 4040kc + FM.
ANN: "Khosum e Yerevan" – **INT-SIG:** Ringing melody from an Armenian folklore song "Garouna" – (Spring) by Komitas – **V.** by QSL-card.

BROADCASTS FROM THE SOVIET COMMITTEE FOR CULTURAL RELATIONS with Fellowcountry men abroad.
ADDR: Sovietskiy komitet po kulturnym svazyam s sootechestvennikami za rubejom, Bolshoj Kharitoneyeskij pereulok 10, Moscow K-62.
Te: K 4-60-16 – **L.P:** Pres. of the Comm: V. M. Malyayev – **Branch in the German Democratic Republic:** Postal Addr: 108, Berlin 8 – **L.P:** Pres: J. J. Soldatov – **D.Prgr:** "Radiostantsiya Rodina".
To Europe: 05.00–06.00 on 1493kc and in 31, 25, 16m.b., 13.00–14.00 in 31, 25, 19, 13m.b, 17.00–18.00 in 31, 25, 19m.b, 19.00–20.00 on 1493kc, and in 49, 31, 25, 19m.b – **To the Americas:** 22.30–23.30 on 620/1170kc, and in 49, 41, 31, 25m.b, 01.00–02.00 in 49, 41, 31, 25m.b.
In Russian (from Leningrad, Rostov, Gorkij, Krasnodar, Barnaul, Stavropol, Voronesh, Irkutsk etc): 05.00–05.30, 13.00–14.00, 17.00–17.30, 19.00–20.00, 22.30–23.30, 01.00–01.30. **Prgr's** from the republics Ukrainia, Bielorussia, Gruzia, Armenia, Azerbajania, Latvia, Lithuania, Estonia in the national languages respectively: 05.30–06.00, 17.30–18.00, 01.30–02.00.
V. by letter. Re. to R. Stn. Rodina, Moscow R. Moscow – ANN: "Govorit Radiostantsiya Rodina" – **PUB:** Prgr. schedule is reprinted in the journal "Golos Rodiny" (=Voice of the Homeland).

FOREIGN SERVICES

RADIO MOSCOW TO EUROPE

Albanian	**m.b.**
15.00–15.30	41a, 31, 25, 19b
17.00–17.30	337, 49a, 41, 31b, 25b
18.30–19.00	337, 49, 41, 25b
19.30–20.00, 20.30–21.00	337, 49, 41, 31b
21.30–22.00	337, 321, 49, 41b
Bulgarian	
06.45–07.00	41a, 31, 25
17.30–18.00	337, 49a, 41, 25b
Danish	
17.00–17.30	49, 41, 31b
18.30–19.00	227, 49, 41, 31b
Dutch	
17.30–18.00	49, 41b, 31b
19.30–20.00	217, 49, 41b, 31b
Czech	
17.00–17.30	257, 49a, 41a, 25b, 19b
Finnish	
16.30–17.30	201, 49, 41b
18.30–19.00	201, 49, 41b
French	
17.30–18.00	217, 49, 41, 31b, 25b
18.00–19.00	217, 49, 41, 31b
19.00–19.30	217, 49a, 41, 31b 25b
20.30–21.00	217, 49, 41, 31
21.00–21.30	227, 217, 49, 41,31
German	
06.00–06.30	227, 49a, 41, 31
10.00–10.30	227, 31, 25, 19
16.00–17.00	1141, 227, 217, 49a, 41a, 31b, 25b 19b
17.30–18.30	257, 227, 49a, 41a 31b, 25b, 19b
20.00–21.00	227, 49, 41, 31b
21.30–22.00	227, 217, 49, 41b
German for Austria	
17.00–17.30	227, 49a, 41, 31b
19.30–20.00	227, 49, 41, 31b
Greek (*to Cyprus)	
15.30–16.00	49a, 41a, 31, 25b
16.30–17.00	337, 49a, 41a, 31, 25b
18.00–18.30*	347, 41a, 31, 25b
19.00–19.30	337, 49, 41, 31b, 25b
20.00–20.30	337, 49, 41, 31b
21.00–21.30	321, 49, 41, 31b
Hungarian	
17.00–17.30	194, 49a, 41, 31, 25b
20.30–21.00	194, 49a, 41, 31b
Italian	
13.30–14.00	25, 19, 16, 13b
17.30–18.30	194, 49a, 41, 31, 25b
19.30–20.30, 21.00–21.30	194, 49, 41, 31, 25b
Macedonian	
18.30–19.00	257, 194, 49a, 41 31d
Norwegian	**m.b.**
11.30–12.00*	457
17.30–18.00	201, 49, 41b
19.30–20.00	201, 49, 41b
*) exc. Sat & Sun	
Polish	
17.00–17.30	217, 49a, 31b, 25b
19.00–19.30	257, 49, 41, 31b
21.00–21.30	337, 257, 49, 41b
Portuguese	
18.30–19.00	49, 41, 31a, 25b, 19b
19.30–20.00	49, 41a, 31, 25b
Rumanian	
07.00–07.30	41a, 31, 25
16.00–16.30	194, 49a, 41a, 31, 25b
18.00–18.30	337, 49, 41, 25b
Serbo-Croat	
15.30–16.00	257a, 49a, 41, 31b, 25b
16.00–16.30	257a, 41, 31b, 25b
16.30–17.00	257a, 194, 49a, 41, 31b, 25b
19.00–19.30	194, 49a, 41, 31d
20.00–20.30	194, 49a, 41
Slovak	
20.00–20.30	257, 49, 41, 31b
Slovenian	
19.30–20.00	257, 49, 41, 31b
Spanish	
12.30–12.45	25, 19
18.00–18.30*	49, 41a, 31b, 25b
20.00–21.00	49, 41, 31b
21.30–22.30	257, 49, 41, 31, 25b
*) Catalan: Tues, Thurs, Sat.	
Swedish	
18.00–18.30	201, 49, 41b
19.00–19.30	201, 49, 41b

TO NEAR & MIDDLE EAST

Arabic	**m.b.**
12.30–13.00	25, 19, 16
14.00–14.30	31, 25, 19
16.00–16.30	309, 41, 31, 25b
17.30–18.00	348, 309, 259, 41, 31, 25b
18.00–18.30	309, 259, 41, 31
18.30–19.00*	41a, 31b, 25b
19.00–20.30	309, 259, 49a, 41, 31, 25b
20.30–21.00**	309, 41a, 31, 25b
21.00–21.30*	49a, 41a, 31, 25b
*) to Algeria; **) to Maghreb Countries	
Persian	
09.30–10.00	25, 19, 16
11.30–12.00	25, 19, 16
15.00–15.30	348, 41, 31, 25
16.30–17.30	348, 259, 41, 31a 25b
18.30–19.00	348, 259, 49a, 41b, 31
Pushtu	
13.30–14.00	375, 31a, 25, 19a, 16b
15.00–15.30	375, 31a, 25, 19b

Broadcasting House in Moscow

THIS IS RADIO MOSCOW!

RADIO MOSCOW can be heard abroad in 55 foreign languages and 10 languages of the USSR on both short and medium waves. All continents are covered.

For the Soviet point of view on foreign affairs and firsthand information on life in the Soviet Union, tune in to RADIO MOSCOW.

RADIO MOSCOW's external services carry the news, reviews of the Soviet press, talks and interviews, youth programmes, features on science and engineering, sports, arts and literature. Music from Moscow is popular.

In 1967 RADIO MOSCOW will broadcast regular programmes devoted to the 50th anniversary of the 1917 Socialist revolution and Soviet government.

Listeners' letters are answered both on the air and by mail. Request music programmes are featured regularly and quizes with prizes for listeners are popular.

TUNE IN TO RADIO MOSCOW!

ADDRESS: RADIO MOSCOW, MOSCOW, USSR

TIMES AND WAVELENGTHS MAY BE FOUND ON PAGE 132 IN THIS HANDBOOK

Pushtu	m.b.
16.30–17.00	375, 41a, 31a, 25b, 19b

Turkish (*to Cyprus)

10.30–11.00	25, 19, 16
13.30–14.00	31, 25, 19
14.30–15.00	41, 31, 25, 19
15.30–16.00*	309, 31, 25, 19
16.30–17.30	309, 41a, 31, 25b
18.30–19.00	309, 41a, 31, 25b

TO AFRICA

Amharic	m.b.
15.30–16.00 } 16.30–17.00 }	228, 41a, 31a, 25a, 19d, 16b
20.00–20.30	228, 41, 31, 25d, 19d

Bambara

19.30–20.00	41a, 31, 25b

French*) to Algeria

05.15–05.30 } 06.45–07.00 }	41a, 31, 25, 19
16.00–16.30	31a, 25, 19
17.00–17.30	31a, 25, 19d, 16a
18.00–18.30	41a, 31, 25b
19.00–19.30	41a, 31, 25b
20.00–20.30*	41a, 31, 25b
20.30–21.00	41a, 31, 25b
21.30–22.00*	49a, 41, 31, 25b
22.00–22.30	49, 41, 31, 25b

Hausa

05.00–05.15	41a, 31, 25b, 19
06.30–06.45	*41a, 31, 25, 19*
17.30–18.00	41a, 31, 25b, 19b
18.30–19.00 } 20.00–20.30 }	41a, 31, 25b

Lingala

18.00–18.30	31a, 25a, 19b, 16b

Malagasy

15.00–15.30	31a, 25a, 19d, 16b

Portuguese

05.30–06.00	41a, 31, 25, 19
16.30–17.00	31a, 25, 19, 16b
19.00–19.30	31a, 25d, 16b
20.00–20.30	31, 25d

Somali

14.00–14.30	31a, 19, 16b
16.00–16.30	228a, 41a, 31a, 25a, 19b, 16b

Swahili

04.30–04.45	31, 25, 19
06.00–06.15	31, 25, 19
10.00–10.30*	19, 16
17.00–17.30	228. 41a, 31a, 25b, 19a, 16b
17.30–18.00	228, 41a, 31, 25b, 19d, 16b
18,00–19.00	228, 41, 31, 25b, 19d, 16b
19.00–20.00	228, 41, 31, 25b, 19d

*) Russian Language Lessons

Zulu

17.30–18.00	31a, 25a, 19d, 16b

TO SO. & SO. EAST ASIA

Bengali	m.b.
10.00–10.30*	25, 19, 16, 13
11.00–11.30**	19, 16, 13b
13.00–13.30*	25a, 19, 16b
14.00–14.30**	31a, 25, 19, 16d
15.00–15.30*	31a, 25, 19d, 16b

*) to Pakistan; **) to India.

Burmese

09.30–10.00	25, 19, 16, 13
10.30–11.00	25, 19, 16, 13
12.00–12.30	25, 19, 16, 13

Cambodian

12.00–12.30	25a, 19, 16d, 13b

Hindi

10.30–11.00	25, 19, 16
11.30–12.00	25, 19, 16
12.30–13.00	259, 25, 19, 16
14.00–14.30	259, 31, 25
15.30–16.00	259, 41, 31, 25, 19

Indonesian

	m.b.
09.30–10.00 } 10.30–11.00 }	19, 16, 13b
11.30–12.00 }	
12.30–13.00	19. 16
13.30–14.30	25a, 19, 16d
15.00–15.30	25, 19, 16d

Laotian

12.30–13.00	25, 19, 16, 13d

Malayalam

11.30–12.00	19, 16
13.30–14.00	31a, 25, 19, 16b

Marathi

10.30–11.00	19, 16
13.00–13.30	25, 19, 16b

Nepali

14.30–15.00	41, 31a, 25, 19, 16b

Punjabi

12.00–12.30	25, 19, 16
13.30–14.00	259, 31, 19d

Sinhalese (to Ceylon)

14.30–15.00 } 15.30–16.00 }	31a, 25, 19b, 16b

Tamil

12.30–13.00	25, 19, 16
14.00–14.30	31a, 25, 19, 16b

Thai

11.30–12.00	25, 19, 16, 13
13.30–14.00	25, 19, 16, 13d

Urdu

*11.00–11.30**	*25, 19, 16*
12.00–12.30**	25, 19, 16
13.00–13.30*	259, 25, 19, 16
14.30–15.00**	259, 31, 25, 19d, 16b
*16.00–16.30**	*259, 31a, 25b, 19*

*) to Pakistan; **) to India

Vietnamese

22.30–23.00	31, 25, 19
10.30–11.00	25, 19, 16b
11.00–11.30	*25, 19, 16, 13*
12.00–12.30	25 19, 16b
13.00–13.30	25, 19, 16, 13d
14.30–15.00	31c, 25, 19, 16d
15.00–17,00	41, 31a, 25b, 19b

TO FAR EAST

Chinese	m.b.
23.00–24.00	240, 31, 25, 19
00.00–01.00	31a, 25b, 19
06.00–07.00	19, 16, 13
07.00–07.30	19, 16, 13
08.30–09.30	547, 240, 49a, 31, 25, 19, 16, 13
09.30–10.30	240, 49a, 31b, 25, 19, 16b
10.30–11.00	547, 240, 31b, 25b
11.00–11.30	547, 240, 49, 41a 31a, 25, 19, 16, 13b
11.30–12.00	240, 25, 19, 16b
12.00–12.30	547, 240, 49a, 41b, 31b, 25b
12.30–13.00	547, 240, 49a, 41, 31, 25, 19, 16
13.00–13.30	547, 240, 49, 41, 25
13.30–14.00	240, 49a, 41, 31, 25
14.00–14.30	547, 240, 49, 41, 31, 25
14.30–15.30	547, 240, 49, 41, 31, 25b, 19b
15.30–16.00	547, 240, 49, 41, 31, 25b

Japanese

08.00–08.30	203, 49a, 41a, 31, 25b
08.30–09.15	477, 203, 49a, 31, 25b
09.15–10.00	477, 203, 49a, 41a, 31b, 25b
10.00–10.30	477, 203, 49a, 41a, 31b, 25b

Japanese

	m.b.
10.30–11.00	477, 203, 41a, 31, 25. 19
12.00–12.30	477, 203, 41a, 31a, 25b, 19b
13.00–13.30	477, 203, 49, 41a, 31, 25b
14.00–14.30	477, 203, 49, 41a, 31, 25b

Korean

21.00–21.30	547, 240, 49a, 41, 31b, 25b
22.00–22.30	547, 240, 31, 25, 19b
09.30–10.30	547, 49a, 31, 25, 19
11.00–11.30	203, 49a, 31b, 25b
11.30–12.00	547, 49a, 41, 31, 25b, 19b
13.30–14.00	547, 49, 41, 31, 25b

Mongolian

03.20–03.40	41c, 31a, 25, 19
0.520–05.50	25, 19, 16
09.30–10.00	31a, 25, 19, 16
11.30–12.00	41a, 31a, 25, 19b, 16b
13.15–14.00	49a, 41a, 31b, 25b, 19d

TO LATIN AMERICA

Quechua	m.b.
21.30–22.00	41a, 31, 25b
00.30–01.00	19, 16

Portuguese (to Brazil)

22.00–23.00	41a, 31, 25b
00.00–00.30	41, 31, 25b
02.00–02.30	41, 31, 25b

Spanish (to Cuba)

23.30–24.00	41a, 31, 25b
00.30–01.30	41a, 31, 25b
01.30–02.00	49a, 41a, 31, 25b
04.00–05.00	41, 31, 25b

Spanish (to Latin America)

1st Prgr

23.00–24.00	41, 31, 25b
01.00–01.30 } 02.30–03.30 }	41, 31, 25b
03.30–04.00	41. 31

2nd Prgr

01.00–03.00	19, 16

Spanish (to Central America)

02.00–03.30	41a, 31, 25b

PROGRAMMES IN ENGLISH

TO EUROPE

Times	m.b.
07.00–07.30	49, 41, 31, 25b
12.00–12.30	25, 19
19.00–19.30	227, 49, 41, 31b
20.00–20.30	217, 49, 41, 31b
21.00–22.00	201, 49, 41, 31b
22.00–22.30	227, 217, 201, 49, 41, 31b

TO AUSTRALIA/NZ

21.30–22.00	547, 240, 49a, 41, 31, 25b, 19b
11.30–12.00	477, 203, 49a, 31, 25b, 19
12.30–13.00	477, 203, 49a, 31b 19
13.30–14.00	477, 203, 49, 31, 19b

TO SO. EAST ASIA

10.00–10.30	25, 19, 16
11.00–11.30	19, 16
15.00–15.30	258, 41, 31, 25, 19b, 16b
16.00–16.30	41, 31a, 25, 16b

TO AFRICA

	m.b.
04.45–05.00	41a, 31, 25, 19
06.15–06.30	41a, 31, 25, 19
15.30–16.00	41, 31a, 25, 19,16b
18.30–19.00	31a, 25, 19b, 16b
19.30–20.00	41a, 31, 25b
20.30–21.00	228, 41, 31, 25d
21.00–21.30	228, 31, 25d
22.30–23.00	49, 41, 31, 25b

TO NORTH AMERICA:

1st Prgr:	m.b.
22.00–22.30 } 23.00–23.30 } 00.00–00.30 } 01.00–01.30 }	41a, 31, 25d
02.00–02.30 } 02.30–03.00 } 03.00–03.30 }	49a, 41a, 31, 25b
04.00–04.30	41a, 31, 25b
05.00–06.00	41, 31, 25b

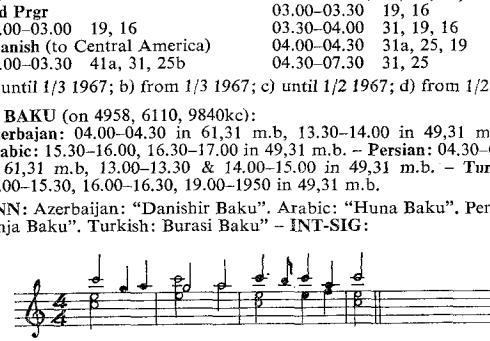
2nd Prgr:

17.30–19.30(Sun)	41, 31, 25b
03.00–03.30	19, 16
03.30–04.00	31, 19, 16
04.00–04.30	31a, 25, 19
04.30–07.30	31, 25

a) until *1/3 1967*; b) from *1/3 1967*; c) until *1/2 1967*; d) from *1/2 1967*

R. BAKU (on 4958, 6110, 9840kc):
Azerbajan: 04.00–04.30 in 61,31 m.b, 13.30–14.00 in 49,31 m.b. – **Arabic:** 15.30–16.00, 16.30–17.00 in 49,31 m.b. – **Persian:** 04.30–04.45 *in* 61,31 m.b, 13.00–13.30 & 14.00–15.00 *in* 49,31 m.b. – **Turkish:** 15.00–15.30, 16.00–16.30, 19.00–1950 in 49,31 m.b.

ANN: Azerbaijan: "Danishir Baku". Arabic: "Huna Baku". Persian: "Inja Baku". Turkish: Burasi Baku" – **INT-SIG:**



R. DUSHANBE:
Persian: 15.30–16.00, 18.00–18.30 in 375,49 m.b. – **Tadjik:** 14.00–15.00 on 375m, 16.00–16.30, 17.00–17.30 in 375,49 m.b.

R. EREVAN
Armenian: 06.00–07.25(Sun) 348,74,41 m.b, 08.00–09.00(Sun) in 41,31 m.b, 15.30–16.30 in 348,41 m.b, 19.30–20.30(Sat/Sun only) to America in 41, 31, 25(b) m.b, 19.30–21.05 in 348,74,41 m.b – **Arabic:** 14.20–15.00 & 19.00–19.30 in 348,74,41 m.b.

R. KIEV:
Ukrainian: To Europe: 16.30–17.00 in 49,41(a), 31,25(b) m.b, 18.00–18.30 in 49,41,31(b) m.b, 19.00–19.30 in 49,31(a), 25(b) m.b, 20.30–21.00 in 49,41,31(b) m.b. To No. America: 22.30–23.00 in 41,31(c), 25(b) m.b, 23.30–24.00 in 49, 41,31m.b, 00.30–01.00 in 41,31 m.b, 03.30–04.00 in 41(a), 31 m.b, 04.30–05.00 in 41,31 m.b. **English:** To Europe(Mon/Wed/Sat) 19.00–19.30 in 49,41(or 31) m.b, 22.30–23.00 (Mon/Wed/Sat) on 1241kc.

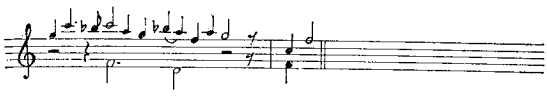
To No. America: 00.30–01.00(Tues/Thurs/Sun) & 04.30–05.00(Tues/Thurs/Sun) in 41.31 m.b. **German:** Tues, Fri 19.15–19.30 in 49, 41 (or 31) m.b., 22.45–23.00 on 1241kc. – **ANN:** "Havoryt Kiev". E: This is R. Kiev". G: "Hier ist R. Kiev" – V. by letter.

R. MINSK: Bielorussian: 18.30–19.00 in 41, 31(a) m.b, 21.30–22.00 in 49 m.b. **Ann:** "Havoryts Minsk".

R. RIGA: Latvian: 08.30–09.15(Sun) & 19.30–20.00(Wed) on 522, 222m; 21.15–22.00(Mon) & 21.30–22.00(Thurs) on 522, 222, 211m – **Swedish:** 08.00–08.30(Sun) on 522m, 20.20–20.50(Thues, Thurs, Sat) on 522, 222m, 21.30–22.00(Wed, Fri, Sun) on 522, 222, 211m.

R. TALLIN: Estonian: 21.05–22.00(Wed/Fri/Sun) on 1034/6085kc – **Finnish:** 08.00–09.15(Sun), 09.15–10.00(W), 16.00–16.30 on 1034/6085kc – **Swedish:** 21.05–22.00(Mon, Tues, Thurs) on 1034/6085kc – **Concert:** 12.10–13.00 on 1034kc – **Ann:** Finnish: "Täälla Tallinna". Swedish: "Här är Tallinn" – V. by QSL-card and letter.

R. TASHKENT in 31, 25 m.b. (9600, 11925kc):
English: 12.00–12.30 & 14.00–14.30 – **Hindi:** 13.00–13.30 & 15.00–15.30 – **Persian:** 16.00–16.30, 17.30–18.00 – **Urdu:** 12.30–13.00 & 13.30–14.00 – **Uzbek:** 16.30–17.00.
ANN: "This is Tashkent Calling" – **INT-SIG:** played on Chang (Uzbek nat. instrument). Violin and Cello.



V. by QSL-card – **Pub:** Prgr. schedule free.

R. VILNIUS: Lithuanian: 21.00–22.00 (exc. Fri & Sun) on 665/1106/1554kc, 22.30–23.00 (exc. Fri, Sun) in 49, 41, 31(b) m.b, 23.00–23.30 in 49, 41, 31(b), 25(b) m.b.
English: Fri & Sun 21.00–21.30 on 665/1106/1554kc, 22.30–23.00 on 665/1106/1554/6200/7180/9740/11710kc.

R. TBILISI: Sun 13.45–14.15 in 49 m.b. in Grusian & local languages.

VATICAN STATE

L.T: GMT+1 h.

VATICAN RADIO (Rel.)
ADDR: Vatican Radio, Vatican City. **Cable:** Vatican Radio. **Te:** 698. **L.P:** Dir. Gen: Rev. Prof. Antonio Stefanizzi S. J. Dir. Prgr: Rev. F. Ramirez S. J. Dir. Tec: Dott. Ing. Tullio Gorio.

STATIONS: Medium Waves:
HV2 787kc 383.6m 2kW – HV100 1529kc 196.2m 100kW.
FM: 93.3, 96.3Mc 0.5kW.

Short Waves: 25/50/100kW. G.C: 12.19E/42.03N & 12.27E/41.54N.

kc	m	kc	m	kc	m	kc	m
5985	50.12	9645	31.10	11825	25.37	15285	19.63
6190	48.47	9695	30.94	11835	25.35	17840	16.82
7250	41.38	11705	25.63	15115	19.85	17880	16.78
9545	31.43	11740	25.55	15120	19.84	21485	13.96
9560	31.38	11760	25.51	15135	19.82	1529	196.2
9615	31.20	11785	25.46	15145	19.81		

PROGRAM SCHEDULE (Nov. 66–March 67):
The wavelengths are subject to change with seasonal variation, or to avoid interference.

TO EUROPE			kc
Albanian:	20.30	Tues, Thurs, Sat	6190, 7250, 1529
Armenian:	15.50	Sun	11740, 15120
Bulgarian:	17.15	Sun, Mon, Wed, Fri	7250, 9645, 11740, 1529
	11.10	Sun	7250, 9645, 11740, 1529
Czech:	12.30	D	7250, 9645, 11740, 1529
	19.30	D	6190, 7250, 9645, 1529
English:	15.00	D	9645, 11740, 15120, 1529
	18.15	D	7250, 9645, 11740, 1529
French:	11.45	D	7250, 9645, 11740, 1529
	14.30	D	9645, 11740, 15120, 1529
	19.15	D	6190, 7250, 9645, 1529
German:	12.45	D	7250, 9645, 11740, 1529
	14.45	D	9645, 11740, 15120, 1529
	19.45	D	6190, 7250, 9645, 1529
Hungarian:	13.00	D	7250, 9645, 11740, 1529
	21.00	D	6190, 7250, 9645, 1529
Italian:	13.30	D	6190, 7250, 9645, 11740, 1529
	18.33	D	6190, 7250, 11740, 1529
	16.00	Fri	6190, 7250, 9645, 1529
	21.30	W	1529
Latin:	11.30	Tues, Thurs, Sat	7250, 9645, 11740, 1529
	16.30	Tues, Thurs, Sat	7250, 9645, 11740, 1529
	21.15	Tues, Thurs, Sat	6190, 7250, 9645, 1529
	20.00	D (H. Rosary)	6190, 7250, 9645, 11740, 1529
Latvian:	07.00	Sun	9645, 11740
	18.00	Tues, Thurs, Sat	9545, 11835
Lithuanian:	06.30	Sun	9645, 11740
	18.15	D	9545, 11835
Polish:	12.15	D	7250, 9645, 11740, 1529
	15.15	D	9645, 11740, 15120, 1529
	19.00	D	6190, 7250, 9645, 1529
Portuguese:	15.30	D	9645, 11740, 15120, 1529
	20.30	D	9695, 11770
Rumanian:	17.30	D	7250, 9645, 11740, 1529
Russian:	14.00	D	9645, 11740, 15120, 1529
	18.00	D	7250, 9645, 11740, 1529
Serbo-Croat:	17.45	D	6190, 7250, 1529
Slovak:	12.00	D	7250, 9645, 11740, 1529
	20.15	D	6190, 7250, 9645, 1529
Slovene:	17.15	Tues, Thurs, Sat	6190, 7250, 9645, 1529
	20.30	Mon, Fri	6190, 7250, 1529
	10.50	Sun	7250, 9645, 1529
Spanish:	14.15	D	9645, 11740, 15120, 1529
	20.45	D	6190, 7250, 9645, 1529
Swedish, Danish, Norwegian:			
	20.30	Sun, Wed	7250, 9645, 1529
Ukrainian:	17.00	D	7250, 9645, 11740, 1529
White Ruth:	06.15	Sun	9645, 11740
	18.00	Sun, Mon, Wed, Fri	9545, 11835
Concert:	21.15	Sun	6190, 7250, 9645, 1529
	16.00	Thurs	6190, 7250, 9645, 1529
Liturgy:			
Latin:	08.30	Sun, Holidays	7250, 9645, 11740, 15120
Oriental:	09.30	Sun, Holidays	7250, 9645, 11740, 15120, 1529
	16.15	Sun	7250, 9645, 11740, 1529

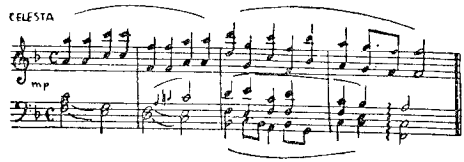
TO AFRICA			kc
Arabic:	16.40	D	11705, 15135
English:	10.00	W	17840, 21485
	10.20	W	17840, 21485
	17.00	D	11705, 15135
	17.40	D	11705, 15135
Ethiopian:	16.20	Mon, Wed, Fri, Sat	11705, 15135
French:	10.50	W	17840, 21485
	11.10	W	17840, 21485
	17.20	D	11705, 15135
	19.00	D	11705, 15145
Portuguese:	10.35	W	17840, 21485
	18.40	D	11705, 15145

TO AMERICA			kc
Portuguese:	23.00	D	11760, 15285
Spanish:	23.30	D	11760, 15285
	00.00	D	7250, 9615, 11760
	00.30	D	5985, 7250, 9645
English:	00.50	D (for USA)	5985, 7250, 9645
French:	01.10	D	5985, 7250, 9645

TO ASIA	* for India	** for Philippines	kc
Arabic:	16.40	D	11705, 15135
Chinese:	22.30	Tues, Thurs, Sat	9560, 11740
English:	**11.55	Tues, Thurs, Sat	11705, 17840
	*14.40	W	11825, 17880
Hindi, Tamil, Malayalam:			
	14.30	W	11825, 17880
Japanese:	21.45	Mon, Wed, Fri, Sat	9560, 11740

TO AUSTRALIA/NEW ZEALAND			kc
English:	11.32	D	11785, 17840
	22.02	D	9560, 11740

OPENING SIG: The Bells of St. Peter's.
ANN: "Laudetur Jesus Christus. Praised be Jesus Christ. This is Vatican Radio".
INT-SIG: Carillon Melody "Christus Vincit" executed on the celeste with orchestral accompaniment.



V. by QSL-card or letter. Recordings accepted. **PUB:** Prgr. sched. free on request.

YUGOSLAVIA

L.T: GMT+1 h – Pr.L: Serbo-Croat, Slovenian, Macedonian.

JUGOSLOVENSKA RADIOTELEVIZIJA (Gov.)

ADDR: 70 Borisa Kidrica, Belgrade. Te: 43-677. Cable: Jugoslovenska radiotelevizija Beograd. Telex 11469 jurate beograd.

L.P: **Radiotelevision Yugoslave**: Pres. Adm. Committee: I. Bojanic. Secr. Gen: Dr. I. Pustisek. Chief Foreign Relations: Mrs. O. Vojvodic. *Commission Political Broadc: Pres: M. Markovic. Secr: Dr. I. Pustisek.* Commission Cultural Broadc: Pres: B. Bozovic. Secr: Mrs. O. Vojvodic. Commission Musical Prgr's: Pres: S. Baric. Secr: Mrs. L. Frajt. Tech. Commission: Pres: Eng. R. Zizic. Jur. Commission: Pres: L. Dimitrovski. Secr: P. Tipsarevic. Commission Formation of Personnel: Pres: B. Nikolic. Secr: P. Tipsarevic. Commission For. Rel: Pres: S. Sabatka. Secr: Mrs. O. Vojvodic. Commission Economic and Fin. Sce: Pres: S. Stefanovic. Secr: Mrs. Lj. Stosic. Board of Radio Prgr: Pres: B. Zlobicki. Secr: I. Pustisek. **Radiotelevision Belgrade**: Dir. Gen: Z. Vukovic. Dir. Tec: Eng. R. Zizic. **Radiotelevision Zagreb**: Dir. Gen: I. Bojanic. Dir. Tec: V. Trs. **Radiotelevision Ljubljana**: Dir. Gen: B. Mikos. Dir. Tec: Eng S Pernus. **Radiotelevision Skopje**: Dir. Gen: D. Tozija. Dir. Tec: T. Dzartov. **R. Sarajevo**: Dir. Gen: V. Savic. Dir. Tec: Eng. F. Lastavec. **R. Titograd**: Dir. Gen: M. Perovic. Dir Tec. Eng. L. Kosovic. **R. Novi Sad**: Dir: S. Sabatka. Dir. Tec: Eng. I. Djukic. **R. Pristina**: Dir: I. Bajra. Dir. Tec: Eng. I. Lozovoj.

MEDIUM WAVES: Main st's in fat types.

SERBIA	kc	m	kW
Belgrade I	683	439.0	400
Nis	926	324.0	10
Novi Sad I	1268	236.6	100
Pristina	1412	212.4	100
Belgrade II	1484	202.2	2
Svetozarevo	1484	202.2	2
Novi Sad II	1484	202.2	2
CROATIA			
Zagreb II	773	388.1	0.05
Split II	782	383.6	2
Rijeka II	782	383.6	2
Sisak	782	383.6	2
Slavonski Brod	881	340.5	0.05
Vukovar	899	333.7	1
Zagreb	1133	264.7	135
Rijeka I	1133	264.7	20
Split I	1133	264.7	50
Zadar	1133	264.7	2
Osijek	1133	264.7	2
Sdrj Dubrovnik	1133	264.7	2
Bjelovar	1214	247.1	0.05
Molve	1363	220.1	0.05
Gospic	1412	212.4	20
Osijek	1412	212.4	2
Zagreb II	1484	202.2	2
Dakovo	1484	202.2	0.05
Knin	1484	202.2	0.05
Porec	1484	202.2	0.05
Pula	1484	202.2	2
Varazdin	1484	202.2	0.05
Križevci	1484	202.2	0.05
Dubrovnik	1493	200.9	2
Zagreb II	1493	200.9	7
Buje	1493	200.9	2
Ludbreg	1493	200.9	0.05
Petrinja	1520	197.4	0.05
Vrbovsko	1570	191.1	0.05
Karlovak	1594	188	0.05
Krapina-Zab.	1594	188	0.05
Rovinj	1594	188	0.05
Vinkovci	1594	188	0.05
Ogulin	1594	188	0.05

SLOVENIA	kc	m	kw
Ljubljana I	917	327.1	135
Koper	1169	256.6	20
Radlje	1241	241.7	0.05
Maribór	1412	212.4	20
Ljubljana II	1484	202.2	2
Celje	1484	202.2	2
Crnomelj	1484	202.2	0.05
Murska Sobota	1484	202.2	2
Tolmin	1484	202.2	0.05
Trzic	1484	202.2	0.05
S. Jelsah	1484	202.2	0.15
Bovec	1484	202.2	0.05
Slovenj Gradec	1502	199.7	0.05
Ptuj	1511	198.5	0.05
Brezice	1562	192.1	0.05
Kobarid	1594	188	0.05
Jesenice	1594	188	0.05
Trbovlje	1594	188	0.05
BOSNIA/HERZEGOVINA			
Sarajevo	611	491	100
Brcko	1330	225.4	0.05
Tuzla	1484	202.2	2
Mostar	1484	202.2	2
MACEDONIA			
Skopje	809	371	135
Bitola	1484	202.2	2
Debar	1484	202.2	0.05
Gevgelija	1484	202.2	0.05
Gostivar	1484	202.2	2
Kavadarci	1484	202.2	0.05
Kicevo	1484	202.2	0.15
Kocani	1484	202.2	0.15
Ohrid	1484	202.2	2
Prilep	1484	202.2	0.035
Resen	1484	202.2	0.15
Strumica	1484	202.2	0.05
Štip	1484	202.2	0.05
Skopje II	1484	202.2	0.40
Struga	1484	202.2	0.025
MONTENEGRO			
Titograd	881	341	100

SHORT WAVES: Beograd (GC: 20.09 E/44.34 N):

kc	m	kW	kc	m	kW	kc	m	kW
6100	49.18	100	9505	31.56	50	11735	25.56	100
6150	48.78	10	9620	31.18	50	15240	19.69	100
7200	71.67	10						

FM:		kW
SERBIA	Mc (ERP)	
Avala I	95.3	40
Avala II	97.7	4
Belgrade I	88.1	0.5
Belgrade II	98.5	0.25
Crni Vrh I	89.7	4
Crni Vrh II	99.3	4
CrveniCot	94.5	40
CrveniC.II	96.5	40
Goles I	99.7	4
Goles II	92.5	4
Jastrebac I	96.9	50
Jastrebac II	89.3	50
Kopaonik I	98.9	4
Kopaon. II	90.9	1
Ovcar I	88.5	4
Ovcar II	90.1	4
Subotica I	92.5	4
Subotica II	88.9	1
Tupiznica I	92.5	4
Tupiznic. II	96.1	4
Novi Sad I	90.5	40
Novi Sad II	87.7	4
Goles	95.7	30

FM:		kW
Pristina	93.7	0.25
CROATIA		
Celevac I	95.1	1.25
Labistica I	91.3	5
Labistica II	96.1	5
Psunj I	97.3	5
Psunj II	99.7	5
Pula I	88.1	5
Sljeme I	92.1	50
Sljeme II	98.5	50
Stipanov		
Gric I	89.7	2.5
Ucka I	99.3	5
Ucka II	96.9	5
Zagreb I	99.3	0.09
Zagreb II	88.1	0.06

FM:		kW
SLOVENIA		
Celje	97.0	0.03
Koper-		
town	89.3	0.375
Koper-		
Beli Kriz	97.7	0.375
Krvavec	98.9	2.5
Kum I	94.1	4.5
Kum II	99.9	1.5
Ljubljana I	96.5	1.5
Ljubljana II	93.5	0.375
Mirna		
Gora I	97.7	0.375
Nanos I	92.9	1.5
Nanos II	95.3	0.375
Plesivec I	90.1	0.375
Plesivec II	92.5	0.375

FM:		kW
Pohorje I	88.5	0.375
Pohorje II	96.9	0.375
Stol	96.4	2.5
BOSNIA/ HERZEGOVINA		
Bjelasnica	98.1	1
Hum	97.3	3
Sarajevo	95.7	1
MACEDONIA		
Crni Vrv	94.1	0.8
Ohrid	92.1	0.012
Pelister	95.7	0.8
Skopje	98.9	0.6
MONTENEGRO		
Bjelasica	92.1	1
Lovcen	94.9	1
Titograd	96.1	1.2

HOME SERVICE:

R.Beograd I: W 03.00–23.20(Sat, Sun 24h) – **N,Comm**: W 03.00, 04.00, 07.00, 09.00, 11.00, 12.00, 13.00, 14.00, 15.00, 17.00, 18.30, 21.00, 22.00, 23.00. Sun 07.00, 09.00, 11.00, 12.00, 14.00, 17.00, 21.00, 22.00, 23.00

R.Beograd II: W 11.00(Sat 10.00, Sun 07.00)–20.00 – **N,Comm**: W 11.00, 13.00, 15.00, 18.00, 19.50. Sun 07.00, 09.00, 11.00, 13.00, 15.00, 17.00, 19.50 – **R.Beograd III**: D 08.00–11.00.

R.Zagreb I: D 03.30–23.05 (Sat 03.30) – **N,Comm**: D 03.30, 04.00, 04.45, 05.15, 06.00, 07.00, 08.00, 09.00, 10.00, 12.00, 13.00, 14.00, 15.00, 16.00, 17.00, 18.30, 20.00.

R.Zagreb II: D 04.30–18.55 – **N,Comm**: W 04.30, 05.30, 07.30, 08.30, 11.30, 14.30, 17.30, 18.50. Sun 04.30, 05.30, 07.30, 09.30, 13.30, 14.30, 16.30, 18.50 – **R.Zagreb III**: D 19.00–22.00.

R.Ljubljana I: W 03.30(Sun 05.00)–22.35(Sat 23.00) – **N,Comm**: W 04.00, 05.00, 06.00, 07.00, 09.00, 10.00, 11.00, 12.00, 13.00, 14.00, 16.00, 17.00, 18.30, 21.00, 22.00, 22.30. Sun 05.05, 06.00, 07.00, 08.00, 10.00, 11.00, 12.00, 14.00, 16.00, 18.30, 21.00, 22.00, 22.30.

R.Ljubljana II: W 18.00 (Sun 09.00)–21.10 – **N,Comm**: W 19.00, 20.00, 22.00. Sun 09.00, 11.00, 12.00, 17.00, 19.00, 20.00, 21.00.

R.Skopje: D 03.55–23.10 – **N,Comm**: W 04.15, 05.15, 06.30, 09.00, 11.00, 14.00, 16.00, 18.30, 21.00, 22.00, 23.00. Sun 04.15, 05.15, 11.00, 13.00, 18.30, 21.00, 22.00, 23.00.

R.Sarajevo: D 04.00–23.05 – **N,Comm**: D 04.05, 05.30, 07.00, 19.00, 20.00, 21.00, 22.00, 23.00.

R.Titograd: W 04.30–07.30, 11.00 (Sun 05.00)–22.00 – **N,Comm**: W 04.30, 05.30, 07.00, 11.00, 12.00, 13.00, 14.00, 15.00, 16.00, 17.00, 18.30, 21.00. Sun 05.00, 05.30, 09.00, 12.00, 13.00, 14.00, 17.00, 18.30, 21.00.

R.Novi Sad I: D 04.00–23.05 – **N,Comm**: W 04.15, 04.45, 05.00, 06.00, 09.00, 11.00, 12.00, 14.00, 15.00, 16.00, 17.00, 18.00, 20.30, 21.00, 23.00. Sun 04.15, 04.45, 05.00, 06.00, 09.00, 11.00, 12.00, 13.00, 16.00, 17.00, 18.00, 20.30, 21.00, 23.00.

R.Novi Sad II: W 13.00–17.00, Sun 07.30–18.00 – **N,Comm**: W 13.03, 13.30, 14.30, 15.30, 16.00, 16.55. Sun 07.30, 10.15, 13.30, 14.30.

R.Priština: W 04.30(Sun 05.00)–22.05 – **N,Comm**: D 04.30, 05.00, 07.00, 11.00, 12.00, 12.30, 14.00, 16.00, 17.00, 18.00, 18.30, 20.00, 21.00, 22.00

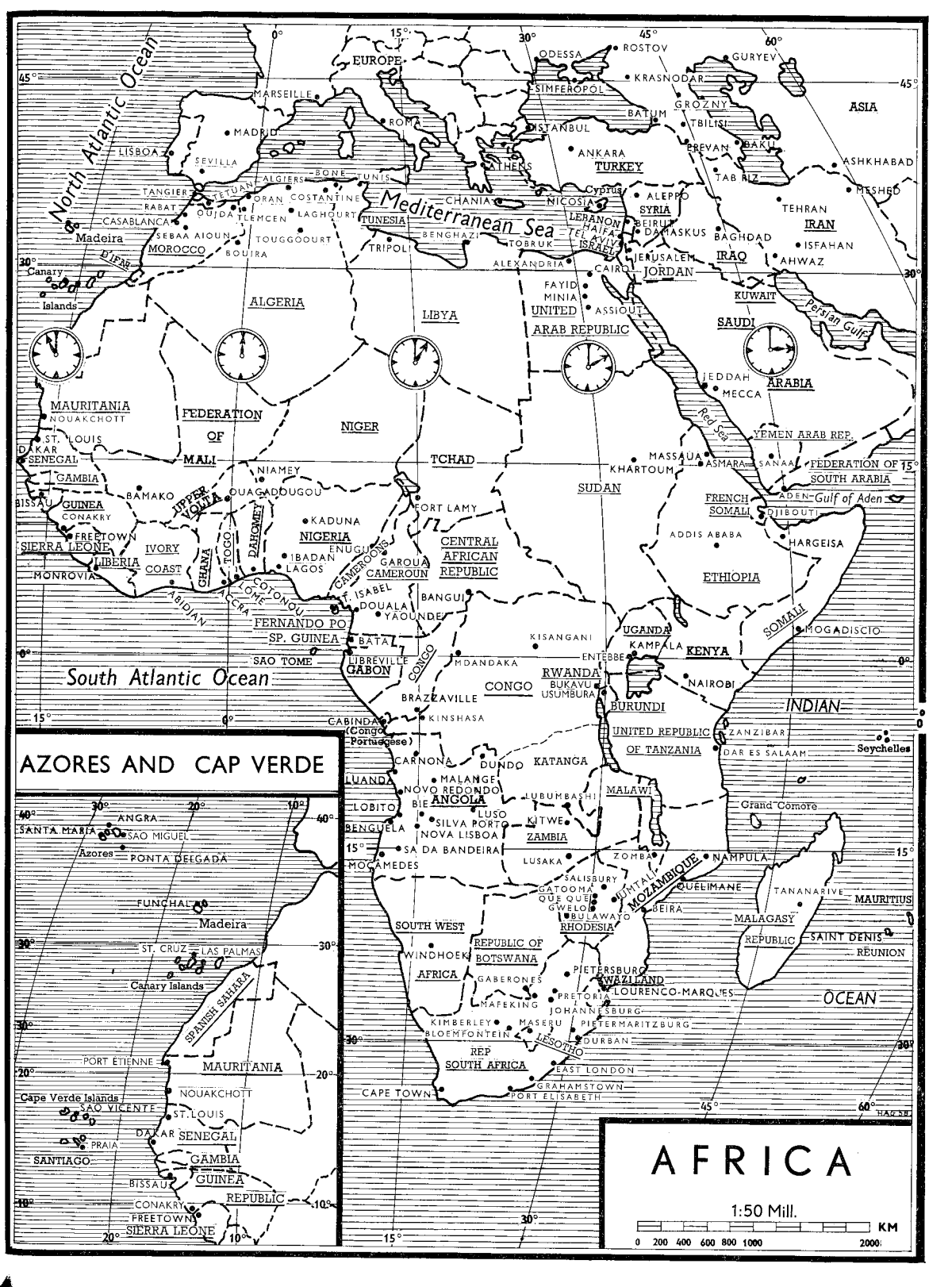
FOREIGN SERVICE

Albanian	kc
14.00–14.30	6100, 7200
20.30–21.00	1412
21.30–22.00	881
Arabic	
15.00–15.30	6100, 11735
17.30–18.00	6100, 7200
Bulgarian	
09.00–10.00	926
14.30–15.00	926
18.00–18.30	6100, 7200
Czech	
20.00–20.30	6100, 7200
21.30–21.45	1268
English	
15.30–16.00	11735, 15240
18.30–19.00	*6100, 7200*
22.00–22.15	1268, 6100, 7200

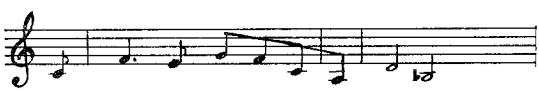
French	kc
16.00–16.30	6100, 7200
22.15–22.30	1268, 6100, 7200
German	
16.45–17.00	6100, 7200
20.30–21.00	6100, 7200
21.45–22.00	1268
Polish	
16.30–16.45	6100, 7200
19.30–20.00	6100, 7200
Russian	
14.30–15.00	*6100, 7200*
17.00–17.30	6100, 7200
19.00–19.30	6100, 7200
Spanish	
00.00–00.30	7200, 11735
01.00–01.30	*7200, 11735*
21.30–22.00	6100, 7200

N: At the beginning of every tr.

ANN: Home Service: "Here is Radiotelevision Beograd, ...Zagreb, ...Ljubljana etc." – "Ovde Radiotelevizija Beograd, ...Zagreb, ...Ljubljana etc." – Foreign Service: "This is Yugoslavia,R.Belgrade calling" – "Ici la Yugoslavie, Belgrade vous parle". "Hier spricht R.Beograd".


AZORES AND CAP VERDE
AFRICA
1:50 Mill.
KM
0 200 400 600 800 1000 2000
North Atlantic Ocean
South Atlantic Ocean
Mediterranean Sea
Persian Gulf
Red Sea
Gulf of Aden
INDIAN OCEAN
EUROPE
ASIA
TURKEY
SYRIA
IRAN
IRAQ
JORDAN
KUWAIT
SAUDI ARABIA
YEMEN ARAB REP.
FEDERATION OF SOUTH ARABIA
FRENCH SOMALI
ETHIOPIA
SOMALI
KENYA
UGANDA
RWANDA
BURUNDI
UNITED REPUBLIC OF TANZANIA
MALAWI
ZAMBIA
MOZAMBIQUE
RHODESIA
SOUTH WEST AFRICA
REPUBLIC OF BOTSWANA
REP SOUTH AFRICA
LESOTHO
SWAZILAND
MALAGASY REPUBLIC
MAURITIUS
SAINT DENIS
REUNION
Madeira
Canary Islands
MOROCCO
ALGERIA
LIBYA
UNITED ARAB REPUBLIC
SUDAN
TCHAD
NIGER
FEDERATION OF MALI
MAURITANIA
SENEGAL
GAMBIA
GUINEA
SIERRA LEONE
LIBERIA
IVORY COAST
GHANA
UPPER VOLTA
DAHOMEY
TOGO
NIGERIA
CAMEROONS
CENTRAL AFRICAN REPUBLIC
CONGO
GABON
FERNANDO PO
SP. GUINEA
SAO TOME
CABINDA (Congo Portuguese)
LUANDA
ANGOLA
BENGUELA
MOCAMEDES
SOUTH WEST AFRICA
WINDHOEK
CAPE TOWN
ANGRA
SANTA MARIA
SAO MIGUEL
Azores
PONTA DELGADA
FUNCHAL
Madeira
ST. CRUZ
LAS PALMAS
Canary Islands
SPANISH SAHARA
PORT ETIENNE
MAURITANIA
NOUAKCHOTT
Cape Verde Islands
SAO VICENTE
ST. LOUIS
DAKAR
SENEGAL
PRAIA
SANTIAGO
GAMBIA
GUINEA
BISSAU
REPUBLIC
CONAKRY
FREETOWN
SIERRA LEONE
ROSTOV
ODESSA
GURYEV
KRASNODAR
SIMFEROPOL
GROZNY
BATUM
TBILISI
ISTANBUL
ANKARA
ATHENS
BAKU
EREVAN
TAB RIZ
ASHKHABAD
MESHED
TEHRAN
ISFAHAN
AHWAZ
BAGHDAD
ALEPPO
BEIRUT
DAMASKUS
JERUSALEM
CAIRO
ALEXANDRIA
FAYID
MINIA
ASSIOUT
JEDDAH
MECCA
MASSAUA
ASMARA
SANAA
KHARTOUM
ADEN
DJIBOUTI
ADDIS ABABA
HARGEISA
MOGADISCIO
KAMPALA
ENTEBBE
NAIROBI
ZANZIBAR
DAR ES SALAAM
Seychelles
Grand Comore
NAMPULA
QUELIMANE
TANANARIVE
BEIRA
SALISBURY
GATOOMA
QUE QUE
GWELO
BULAWAYO
LUSAKA
ZOMBA
LUBUMBASHI
KITWE
LUSO
SILVA PORTO
NOVA LISBOA
SA DA BANDEIRA
MALANGE
NOVO REDONDO
BIE
LOBITO
CARNONA
DUNDO
KATANGA
MDANDAKA
KISANGANI
BRAZZAVILLE
KINSHASA
BANGUI
DOUALA
YAOUNDE
BATA
LIBREVILLE
ENUGU
IBADAN
LAGOS
KADUNA
FORT LAMY
NIAMEY
OUAGADOUGOU
BAMAKO
CONAKRY
FREETOWN
MONROVIA
ABIDJAN
ACCRA
LOME
COTONOU
ST. ISABEL
MARSEILLE
MADRID
LISBOA
SEVILLA
TANGIER
RABAT
CASABLANCA
SEBAA AIOUN
TETUAN
ALGIERS
BONE
TUNIS
ORAN
COSTANTINE
OUJDA
TLEMCEN
LAGHOURT
TOUGGOURT
BOUIRA
TUNESIA
TRIPOLI
BENGHAZI
TOBRUK
CHANIA
NICOSIA
Cyprus
LEBANON
HAIFA
TEL AVIV
ISRAEL
BAIRUT
ISRAEL
ROMA
EUROPE
ASIA
AFRICA
1:50 Mill.
KM
0 200 400 600 800 1000 2000

INT-SIG: Home and Foreign Service: The beginning of the "Internationale" (Radio Belgrade).



V. by QSL-card. Re. to: Chief Editor of External Broadcasting. 2 Hilendarska, Beograd. Recordings accepted.
FI: by licence payments and adv – **AD:** Beograd 1st Prgr: W 90 min, Sun 70 min. Beograd 2nd Prgr: W 15 min, Sun 20 min. Zagreb: 1st Prgr: D 80 min, 2nd Prgr: 25 min. Ljubljana: 1st Prgr: W 170 min, Sun 115 min. 2nd Prgr: W 45 min, Sun 65 min. Sarajevo: W 108 min, Sun 78 min. Skopje: W 146 min, Sun 106 min. Titograd: W 90 min, Sun 96 min. Novi Sad: 1st Prgr: W 94 min, Sun 112 min. 2nd Prgr: W 19 min, Sun 24 min. Priština: D 143 min.
ALF: 7.200,– Din.

AFRICA

ALGERIA

L.T: GMT – **Pr.L:** French, Arabic, Kabyl.
RADIODIFFUSION-TÉLEVISION ALGERIENNE (Gov.)
ADDR: 21, Blv. des Martyrs, Algiers. Te: 602300. **Telex:** 91014.
L.P: Dir. Gen: M. R. Mohamed. Dir. Adm: M. Hadjij. Dir. Tec: A. Laghouati. Dir. Prgr's: A. Maraf. Dir. External Rel: M. Mahfoud.

ARABIC NETWORK: W 06.00–09.00, 12.00–24.00. Sun 06.00–24.00.

	kc	m	kW		kc	m	kW
Oran I	548	547.4	300	Algiers	5970	50.25	50
Algiers I	980	306.1	200	Algiers	9510	31.55	50
Constantine I	1142	262.7	40	Algiers	11810	25.40	50

N: 07.00, 10.00, 12.00, 13.15, 15.00, 17.15, 18.00, 20.00, 22.30, 24.00.

FRENCH NETWORK: W 06.30–09.00, 11.00–14.30, 17.00–22.00. Sun 07.00–22.00.

	kc	m	kW		kc	m	kW
Algiers II	890	331.1	200	Algiers	6175	48.58	50
Constantine II	1304	230.1	20	Algiers	11835	25.35	50
Oran II	1304	230.1	20				

N: 07.30, 12.15, 13.00, 18.00, 19.00, 19.45, 21.45.

KABYL NETWORK: D 06.30–09.00, 12.00–15.00, 18.00–23.00.

	kc	m	kW		kc	m	kW		kc	m	kW
Algiers III	1421	211	40	–	7170	41.84	50	–	11715	25.61	100
Algiers	6080	49.34	100	–	9685	30.98	50				

N: 07.15, 12.30, 14.45, 18.02, 19.30, 22.40.

SUPPLEMENTARY NETWORK (relays French, Arabic netw, local prgr's): 11.00–13.15, 17.00–23.00.

	kc	m	kW		kc	m	kW
Touggoourt	557	539	1	Setif	854	351	0.05
Laghourt	575	522	4	Batna	1016	295	1
Bouira	692	434	1	Souk Ahras	1079	278	1
Tlemcen	746	402	1	Bougie	1594	188.2	0.6

RELAYS ON SHORTWAVE (G.C: 03.00E/37.00N)
Arabic (to Morocco, Middle East): 06.00–09.00, 17.00–24.00 on 5970kc, 12.00–17.00 on 9510/11810kc – **French** (to Europe): 06.30–08.30, 17.00–23.00 on 6175kc, 08.30–17.00 on 11835kc – **Kabyl** (to Europe): 06.30–08.30(Sun 09.00), 18.00(Sun 17.00)–23.00 on 6080/7170kc, 12.00–15.00(Sun 17.00) on 9685/11715kc.

FOREIGN SERVICE on 890/6175/11835kc:
English 22.00–22.30, **Spanish** 22.30–23.00.
ANN: F: "Ici Alger Radiodiff. Télévision de la République Algerienne Democratique et populaire". Arabic: "Houna el Djazair Idhaatou el Djamhouriati el Djazariyati el Demaukrati hati oua ch'chaa bi'yati".
V. by QSL-card. Re. in French – **ALF:** DA 25,–.

ANGOLA (Portuguese West Africa)

L.T: GMT+1 h – **Pr.L:** Portuguese.
DIRECÇÃO DOS SERVIÇOS DOS CORREIOS, TELEGRAFOS E TELEFONOS, LUANDA
L.P: Dir: A. Cardoso de Sousa.
STATIONS: Call CR6 – All st's comm. exc. 1) (Gov.), 14) (Rlg).

Short Waves:	kc	m	kW	Name – time of tr.
1) RZ	3375	89.89	10	R. Angola: 17.45–01.00
2) RD	3704	80.99	1	R. Cl. do Huambo: 16.00–23.00
3) RM	3740	80.21	0.75	R. Cl. de Moçâmedes: W 16.30–22.00, Sun 16.00–21.00
4) SG	3970	75.75	1	R. Cl. da Huila: W 06.30–13.30, 15.30–23.00. Sun 07.30–20.00
5) RF	3975	75.47	0.25	R. Cl. de Benguela: W 05.45–07.00, 10.00–13.30, 16.30–21.30. Sun 07.00–21.00
6) –	3995	75.09	10	R. Comercial de Angola: W 06.00–13.00, 16.00–24.00. Sun 08.00–24.00
7) RG	4770	62.89	0.5	R. Diamang: W 18.00–19.30. Sun 11.00–12.30
6) –	4795	62.57	10	R. Comercial de Angola: W 06.00–13.00, 16.00–24.00. Sun 08.00–24.00
1) RZ	4820	62.24	10	R. Angola: 06.00–01.00
8) RY	4840	61.98	1	R. Cl. do Cuanza Sul: W 11.00–13.00, 16.00–22.00. Sun 11.00–21.00
9) RU	4850	61.86	1	R. Cl. do Congo Portuguese: W 06.00–08.00, 11.00–14.00, 17.00–22.00. Sun 08.00–20.00
10) RN	4860	61.73	1	R. Cl. de Angola: W 05.15–23.00. Sun 07.00–22.00
11) RO	4896	61.27	1	R. Cl. do Bié: W 06.00–07.00, 11.00–13.00, 16.00–22.00. Sun 07.00–19.00
12) RS	4905	61.16	1	R. Cl. do Lobito: 06.00–23.00
13) RE	4935	60.80	1	R. Cl. de Malanje: 06.00–09.00, 11.00–14.00(Sat/Sun 16.00), 16.00–22.00(Sat 23.00)
14) RB	4984	60.19	1	R. Ecclesia: 05.15–24.00
3) RM	5015	59.82	1	R. Cl. de Moçâmedes: W 16.30–22.00, Sun 07.00–10.00. 16.00–21.00
4) RH	5024	59.71	1	R. Cl. da Huila: W 06.30–13.30, 15.30–23.00. Sun 07.30–20.00
15) RW	5033	59.59	1	R. Cl. de Cabinda: W 06.00–08.00, 11.30–13.30, 17.30–21.30. Sun 08.00–14.00, 16.00–20.00
5) RF	5042	59.50	1	R. Cl. de Benguela: W 05.45–07.00, 10.00–13.30, 15.30–23.00. Sun 07.00–21.00
2) RD	5060	59.29	1	R. Cl. do Huambo: 16.00–23.00
16) RV	5137	58.40	1	R. Cl. do Moxico: W 05.30–09.00, 11.00–14.00, 17.00–22.00. Sun 08.00–20.00
1) RZ	6025	49.79	10	R. Angola: 06.00–10.00, 17.45–01.00
5) RF	6150	48.78	1	R. Cl. de Benguela: W 05.45–07.00, 10.00–13.30. Sun 07.00–17.00
13) RE	7115	42.15	0.5	R. Cl. de Malanje: 06.00–09.00, 11.00–14.00(Sat/Sun 16.00)
10) RA	7140	42.02	0.25	R. Cl. de Angola: W 05.15–23.00, Sun 07.00–22.00
2) RD	7160	41.90	1	R. Cl. de Huambo: 05.30–13.30
12) RS	7175	41.81	1	R. Cl. do Lobito: 06.00–23.00
11) RO	7203	41.65	1	R. Cl. do Bié: W 06.00–07.00, 11.00–13.00, 16.00–22.00. Sun 07.00–19.00
3) RM	7230	41.49	0.75	R. Cl. de Moçâmedes: W 06.00–09.00, 11.00–13.30. Sun 07.00–16.00
1) RZ	7235	41.47	10	R. Angola: 06.00–17.45
6) –	7285	41.18	10	R. Comercial de Angola: D 06.00 (Sun 08.00)–13.00
8) RP	7285	41.18	0.25	R. Cl. do Cuanza Sul: W 11.00–13.00, 16.00–22.00. Sun 11.00–21.00
3) RM	9515	31.53	1	R. Cl. de Moçâmedes: W 06.00–09.00, 11.00–13.30.
1) RZ	9535	31.46	10	R. Angola: 10.00–17.45
7) RI	9612	31.21	1	R. Diamang: W 18.00–19.30. Sun 11.00–12.30
10) RL	9630	31.15	1	R. Cl. de Angola: W 05.15–23.00. Sun 07.00–22.00
2) RD	9660	31.06	1	R. Cl. de Huambo: W 05.30–13.30. Sun 11.00–16.00
7) RR	11685	25.67	1	R. Diamang: W 18.00–19.30. Sun 11.00–12.30
14) RB	11755	25.52	0.2	R. Ecclesia: 05.15–24.00
4) SG	11940	25.13	1	R. Cl. da Huila: W 06.30–13.30, 15.30–23.00. Sun 07.30–20.00

Medium Waves: °=Short Wave

Call	kc	m	kW	Call	kc	m	kW
10) R	°830	361.4	1	3) RM	°1331	225.4	1
1) RZ	°872	344.0	10	15) RW	°1340	224.0	1
14) RB	°1010	297.0	1	4) RA	°1367	219.5	1
12) RS	°1110	270.0	1	11) RO	°1385	217.0	1
8) PR	°1160	259.0	1	6) –	°1405	213.5	1
9) RU	°1187	252.7	1	17) –	1435	209.0	0.5
13) RE	°1205	249.0	1	2) RD	°1502	199.7	1
16) –	°1214	247.0	1	5) –	°1529	196.2	1
2) RD	°1259	238.0	1	17) –	1550	193.5	0.5
1) RZ	°1295	231.0	1				

FM: 1) 92.7Mc 0.01kW – 2) 97.1Mc 0.05kW – 5) 99.5Mc 0.05kW –

6) 90.5Mc – 8) 93.8Mc 1kW – 10) 97.5Mc – 12) 93.6Mc 0.25kW – 14) 97.5Mc.
Short Waves:
1) C.P. 1321, Luanda. **Te:** 2192. **L.P:** Dir. Gen: C. J. da Gama Cardoso. Dir. Tec: J. C. Proença. Dir. Prgr: R. J. de Sousa Romano. Dir. Adm: A. Diogo Jr. **D.Prgr:** N: 06.05, 09.00, 10.00, 12.00, 14.00, 17.00, 19.00, 22.00, 23.30, 24.00. **Classical cultural Prgr:** 19.30–23.00 on 872kc. **English:** 17.05–17.45 on 7235/9535kc, 10.15–10.55 (repeat from day before) on 9535kc. **French:** 10.15–10.55 on 7235kc, 11.15–11.55 (repeat) on 4820kc. **MW:** 06.00–19.30 on 872kc; 06.00–01.00 on 1295kc. **Ann:** "Aqui Portugal, Emissora Oficial da Provincia de Angola, Luanda". E: "This is Luanda calling from the Studios of the National R. Station of Angola, Portugal". F: "La Portugal à l'Afrique vous parle, la Radiodiff. Officiale de la Province du Angola en Luanda". **Int-Sig:** Kizanzi (first movements of Nat. Anthem). **V.** by QSL-card. **Re.** appreciated.
2) C.P. 125, Nova Lisboa. **Te:** 2239. **Cable:** Radihuambo – **L.P:** Pres: A. M. da Ponte. Vice Pres: E. P. Roque. Scr: R. F. da Silva. Dir. Prgr: A. Caratão. **D.Prgr: Umbundo:** 17.00–19.00 on 3704/1502kc. **MW:** 05.30–13.30, 16.00–23.00 on 1259/1502kc. **Ann:** P: "Aqui Angola, Portugal, de Nova Lisboa transmite o R. Clube do Huambo, Uma voz portuguesa em Africa" (This is Angola, Portugal, R. Clube of Huambo, Nova Lisboa, A Portuguese voice in Africa). Umbundo: "Kulo ko Angola Portugal. Y1o ó R. Clube yo Huambo, ko Nova Lisboa, Ocipama cetu ca Cruzeiro do Sul". **Int. Sig:** Birdchirping. **V.** by QSL-card.
3) C.P. 174, Moçâmedes. **Te:** 200. **Cable:** Radioclube. **L.P:** Pres: J. J. Chalupa. St.Mgr: R. R. Costa. **D.Prgr: N:** 06.30(W), 12.00, 19.00. **English:** Sun 10.00–11.00 on 9515kc to So. & So. We. Africa. **MW:** W 06.00–09.00, 10.00–21.00. Sun 07.00–21.00 on 1331kc. **Ann:** "R. Clube de Moçâmedes, em Angola, Provincia Portuguesa de Africa". **V.** by QSL-card.
4) C.P. 111, Sá da Bandeira. **Te:** 92. **Cable:** Radioclube. **L.P:** Pres: Dr. E. de Figueiredo Fernandes. Dir. Tec: J. H. Guimares. **D.Prgr: N:** 07.30, 12.00, 19.30. **Ann:** "R. Clube da Huila em Sá da Bandeira, Angola, Provincia de Portugal em Africa". **Int-Sig:** First movements from "Bailinho da Madeira". **V.** by QSL-card. Rp.
5) C.P. 19, Benguela. **Te:** 117. **Cable:** Radio Clube. **L.P:** Pres: L. N. Serodio. Chief Prod: A. Freire. **D.Prgr: N:** 06.30(W), 09.00(Sun), 11.30(W), 12.30(Sun), 18.30, 22.45(W). **Wrp:** after N. 11.30, 18.30. **MW:** W 05.45–13.30, 15.30–23.00, Sun 07.00–21.00 on 1529kc. Emissor Reg. do Cubal (3975kc). **Ann:** "R. Clube de Benguela, Angola, Provincia Portuguesa de Africa". **Int-Sig:** Solo on Kissange, a native instrument. **V.** by QSL-card or letter. Recordings accepted.
6) C.P. 269, Sá da Bandeira. **Te:** 115. **Cable:** Radial. **L.P:** Dir. Gen: A. Maria Telo. Mgr: J. J. A. da Cunha. Dir. Tec: L. Pereira Venâncio. **Mgr.Prod:** C. Sanches. **D.Prgr: N:** 06.00(W), 11.00, 18.30 – **MW/FM:** W 06.00–13.00, 16.00–24.00, Sun 08.00–24.00 on 1405kc/90.5Mc. **Ann:** "R. Comercial de Angola a Voz de Amizade, com os seus estudios em Sá da Bandeira". **Int-Sig:** Trumpets, Drums. **V.** by letter.
7) C.P. 1247, Dundo. Lunda. **Cable:** Diamang, Portugalia. **L.P:** Dir. Gen: J. A. Bexiga. Dir. Tec: F. O. T. Rego – R. Diamang is a private st. which aims only to entertain the Diamang employees who work in the mining fields of Lunda. The Prgr's are varied and consist only of classic, light and native music – **Ann:** "Aqui Dundo, Angola, Provincia Portuguesa de Africa, R. Diamang, Estação Emissora da Compañhia de Diamantes de Angola". **Int-Sig:** At opening "Marimba" solo (native instruments of percussion similar to the xylophone). **V.** by QSL-card. **Re.** in P, E. or F.
8) C.P. 10, Novo Redondo. **L.P:** Pres: Eng. C. Horta. Dir. Tec: J. Vilela. **Ann:** "R. Clube do Cuanza Sul, Angola, Provincia Portuguesa d'Africa". **Int-Sig:** Guitar. **V.** by QSL-card.
9) C.P. 140, Carmona. **Te:** 26. **Cable:** Radioclube. **L.P:** Pres: J. J. Nogueira. Vice Pres: J. de Sousa Mendez da Rocha Diniz. Secr: J. A. Gonçalves Nabais. **D.Prgr: N:** 06.15, 12.00, 19.00. **Ann:** "R. Clube do Congo Portugues, em Angola, Provincia Portuguesa d'Africa". **Int-Sig:** Passarinhos followed by a march "Angola é Nossa". **V.** by letter.
10) C.P. 229, Luanda. **Te:** 3448. **Cable:** Radangola. **L.P:** Pres: Com: M. de Albuquerque e Castro. Dir. of Prod: A. M. da Costa. Tec. Mgr: H. B. Victor. Prgr.Mgr: A. dos Santos e Sousa. **D.Prgr: N:** 05.30, 06.45, 11.30, 12.45, 17.30, 18.45. **Ann:** "Angola, Provincia Portuguesa de Africa; de São Paulo de Luanda emite R. Clube de Angola, a vossa estaçao..." – **V.** by QSL-card.
11) C.P. 33, Silva Porto. **L.P:** J. P. de Andrade. Dir. Prgr's: F. Texeira. Dir.Tec: R. Mauricic. **D.Prgr: N:** 06.20(W), 11.20, 18.20. **Ann:** "R. Clube do Bié em Silva Porto, Angola, Provincia de Portugal em Africa". **Int-Sig:** Gong. **V.** by QSL-card.
12) C.P. 56, Lobito. **Te:** 62. **L.P:** Pres: Dr. L. C. Fernandes dos Santos. Dir.Tec: A. Fernandes. Dir.Prgr: J. E. Monteiro. **D.Prgr: N:** 06.05, 12.00, 16.45, 19.00, 21.30, 22.50. **Ann:** "Angola, Portugal transmite o R. Clube do Lobito". **Int-Sig:** Gong. **V.** by QSL-card or letter. **Re.** in E, F, P, Sp.
13) C.P. 83, Malanje. **Te:** 30. **L.P:** Pres: J. B. P. do Amaral. Dir. Prgr: J. de Sousa Berenguel. Dir.Tec: J. C. A. da Silva. **D.Prgr: N:** 06.30, 11.50, 19.00, 22.00(Sat). **MW:** 06.00–09.00, 11.00–14.00

WORLD PUBLICATIONS present

TWO NEW PUBLICATIONS:
WORLD MEDIUM WAVE GUIDE 1967

The only book which give you Worldwide listening in one volume.

The Fourth Edition of the WORLD MEDIUM WAVE GUIDE is now ready. In this you will find the most up-to-date listing of all m.w. stations throughout the world. The front section is listing by kilocycles of all the world broadcasting stations. The No. American section is broken down to three parts, by kilocycle, by alphabeth listing of locations, and alphabeth listing by call letter. This will give you a quick and easy reference to the stations.
Price. Da.kr. 16.50, US $ 2.50, £ 0/16/9, DM 9.75, Sw.Kr. 12.75. Postage extra: Da.Kr. 1.60, US $ 0.25, £ 0/1/6, DM 1.00, Sw.Kr. 0.90, Airmail extra: US $ 1.75 or £ 0/12/0.

NEWS FROM AROUND THE WORLD 1967

The 1967 edition of "News from Around the World" is now available. We suppose you prefer to listen to the news **direct** from the places where the events are happening. We therefore recommend you to order a copy, which will enable you to follow the current events in different countries. The survey is arranged hour by hour and language by language and give you the necessary practical information.
Price: Da.Kr. 14.50, US $ 2.00, £ 0/15/0, DM 8.75, Sw.Kr. 9.90. Transport extra: Da.Kr. 1.40, US $ 0.20, £ 0/1/6, DM 0.90, Sw.Kr. 1.00. Airmail extra: US $ 1.75, £ 0/12/2.

PUBLICATIONS OF INTEREST FOR LISTENERS AND AMATEURS:

IMPROVE YOUR SHORTWAVE RECEPTION

A "how to build" handbook on shortwave equipment, in order to obtain the best possible reception. Price: Da.Kr. 18.50, US $ 2.75, £ 0/19/0, DM 10.85, Sw.Kr. 13.75. Postage extra: Da.Kr. 1.65, US $ 0.25, £ 0/1/9, DM 1.00.

SHORT WAVE ANTENNAS - for your purpose

Every listener has his own technical and practical problems. This handbook tells you how to solve yours and give you better reception. Price: Da.Kr. 9.75, US $ 1.25, £ 0/10/0, DM 6.00, Sw.Kr. 7.50. Postage extra: Da.Kr. 1.30, US $ 0.20, £ 0/1/6, DM 0.80, Sw.Kr. 1.00.

RADIO-TV-CONSTRUCTORS HANDBOOK

How to build many different equipment for Radio and TV. **Complete Instructions.** Price: Da.Kr. 29.75, US $ 4.35, £ 1/10/0, DM 17.50, Sw.Kr. 20.00. Postage extra: Da.Kr. 2.00, US $ 0.30, £ 0/2/3, DM 1.20, Sw.Kr. 1.00.

TRANSISTORS IN PRACTICE

Theory, Practice and "How to build" descriptions.
Price: Da.Kr. 29.75, US $ 4.35, £ 1/10/0, DM 17.50, Sw.Kr. 20.00. Postage extra: Da.Kr. 2.00, US $ 0.30, £ 0/2/3, DM 1.20, Sw.Kr. 1.00. Will be available at the end of February.

HOW TO BUILD TV-ANTENNAS

Price: Da.Kr. 16.50, US $ 2.50, £ 0/17/0, DM 10.00, Sw.Kr. 12.50. Postage extra: Da.Kr. 1.65, US $ 0.25, £ 0/1/9, DM 1.00, Sw.Kr. 0.80.

HOW TO IMPROVE YOUR TV-RECEPTION

Price: Da.Kr. 7.00, US $ 1.00, £ 0/8/0, DM 4.75, Sw.Kr. 5.00. Transport extra. As for Short Wave Antennas.

Please write for brochures.
Obtainable from your bookseller or direct from

WORLD PUBLICATIONS

Lindorfsallé 1, Hellerup, Denmark
Telephone: Hellerup 3808 - Cable: World Publications,

MORE INFORMATION on page 82 and 195

(Sat/Sun 16.00), 16.00–22.00 on 1205kc. **Ann:** "Aqui Portugal transmite o R. Clube de Malanje em Angola, Provincia de Africa". **Int-Sig:** Some movements from "Reida Festa" on Guitar". V. by QSL-card.
14) C.P. 156, Luanda. **Te:** 2302. **Cable:** "Eccléesia". **L.P:** Dir.Gen: J. M. Pereira. Dir.Tec: J. F. Dimiz da Gama. **D.Prgr:** N: 06.00, 11.45, 18.15, 21.30, 23.00, 23.45. **Ann:** "Aqui Portugal R. Ecclésia, Emisora Catolica da Angola". **Int-Sig:** Music from "A Treze de Maio". V. by QSL-card.
15) C.P. 116, Cabinda. **Te:** 116. **L.P:** Pres: Dr. J. Delgado. Dir.Tec: A. T. Monis. **D.Prgr:** N: 06.30, 12.00, 17.30(Sun), 19.00(W). **Ann:** "Aqui Cabinda, Angola, Provincia Portuguesa d'Africa transmite o R. Clube de Cabinda". **Int-Sig:** Gong. V. by QSL-card or letter. Recordings accepted.
16) C.P. 74, Luso. **Cable:** Radioclube. **L.P:** Pres: J. P. d'Albuquerque. Vice Pres: O. G. Pernes. Secr: E. M. Gonçalves. **D.Prgr:** N: 07.00, 08.00, 11.05, 12.00, 13.00, 18.00, 19.00, 20.00, 21.00. **Ann:** "R. Clube do Moxico, em Luso, Angola, Provincia Portuguesa em Africa". **Int-Sig:** Gong. V. by letter.
Medium Waves: 17) A Voz de Luanda, C.P. 6543, Luanda. **Te:** 2907 – **L.P:** Dir.Gen: C. Moutinho. Dir.Tec: A. de Oliveira Lopes – **D.Prgr:** 05.15–01.15 – **Ann:** "Aqui Portugal, da Cidade Capital de Angola transmite "A Voz de Luanda" – V. by letter. Recordings accepted.

ASCENCION ISLAND (British)

L.T: GMT – **Pr.L:** English.
VOLCANO RADIO (Priv.)
Operated by members of RCA and Pan-American Airways – **ADDR:** Volcano Radio, Ascension Island – **L.P:** Eng-in-charge: P. K. Reid Jr. **STATION:** 1600kc 1kW: 24 h in English. V. by letter. Re. to Box 4187, Patrick Air Force Base, Fla. 32925, USA.

BBC SOUTH ATLANTIC RELAY
4×250kW tr's for relays of BBC world Sce, French, Hausa & English Sce's got Africa and Latin American Sce. expected to be in operation early 1967.
At press time one tr. in operation on 15140kc at 17.45–18.30(WS), 18.30–19.30(French), 19.30–19.45(Hausa), 19.45–22.45(WS).

BOTSWANA (Rep.)

L.T: GMT+2 h – **Pr.L:** English, Setswana.
RADIO BOTSWANA (Gov.)
ADDR: P.O. Box 52, Gaberones – **L.P:** Dir. of Inf & Broadc: D. M. Mokaila. Chief. Eng: C. I. Kennedy.
STATIONS: 971kc 1kW – **FM:** 90.7Mc 0.25kW
3356kc 89.40m 10kW – 5965kc 50.29m 10kW.
HOME SCE: 05.45–07.00 (Tues, Thurs) on 971/5965kc + FM, 15.30–18.00 on 971/3356kc + FM – **ANN:** E: "This is R. Botswana" – V. by QSL-card. **F.PL:** Operation of the former BBC relay st. in Francistown (602/926kc 50kW; 4845/7295kc 10kW).

BURUNDI (Kingdom)

L.T: GMT+2 h – **Pr.L:** Kirundi, Kiswahili, French.
RADIO BURUNDI (Gov.)
ADDR: B.P. 1900, Bujumbura. **Te:** 2236. **Cable:** Inforburundi – **L.P:** Dir. Gen: E. F. Bangemu. Dir. of Inf: L. Kahungu. Dir. of Prgr's: J. Bukuru.
STATIONS (G.C: 29.21E/03.23S):
1168kc 256.4m 1kW – 6195kc 48.43m 10kW.
HOME SCE. in French, Kirundi, Kiswahili: W 04.00–05.45, 10.00–11.45, 15.00–21.00. Sun 04.00–12.00, 14.30–21.00. **N in French:** 04.45, 10.45, 18.00. **N in Kirundi:** 05.00, 11.00, 17.00. **N in Kiswahili:** 05.15, 11.15, 17.30 – **L.L:** English: Mon, Wed 15.30. French: Tues, Thurs 15.30.
ANN: F: "Ici Bujumbura, station de Radiodiff. Nationale du Burundi émettant dans les bandes des 48m et 252metres, soit 6195kc, 1165kc" – **INT-SIG:** A Rundi (umuduli) vocal bow: This is an ordinary bow that is stretched over the tendon of an ox, fitted with a calabash bowl instead of a resonance box. This instrument produces a monotonous rhythmical tone consisting of two characteristic sounds – V. by QSL-card. Recordings accepted – **PUB:** Prgr.schedule – **F.PL:** 25kW tr.

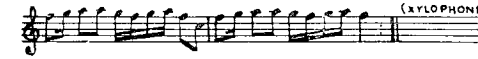
RADIO CORDAC (Corporation de Radiodiffusion de l'Afrique Central – Central African Broadcasting Company, a Missionary Broadc. Station).
ADDR: B.P. 1140, Bujumbura. **Te:** 2503. **Cable:** "Cordac" – **L.P:** Dir. of Inf: R. D. Kellum. Dir. Tec: J. E. Morris.
STATIONS: 9UB93 1400kc 0.25kW – FM: 93.5Mc 0.25kW – 9UB92 3985kc 75.38m 0.25kW – 9UB94 4920kc 60.98m 2.5kW.
HOME SCE: (rlg. prgr's) **in Kirundi, Kiswahili, French, English:** D. 04.00–05.30(Sun 07.30), 10.00–11.00, 17.00–19.30(rlg's and musical prgr's): **English:** 05.15–05.30, 19.00–19.30. **French:** 05.00–05.15, 18.30–19.00. Other times in Kirundi, Kiswahili.
ANN: E: "This is Cordac Bujumbura, Burundi. The Central Africa Broadc. Co. Incorporated" – **INT-SIG:** "Come Ye thankful people come" played on Carillon – V. by QSL-card. Recordings accepted. Rp.
PUB: "News Flashes" monthly bulletin in English, Kirundi free upon request.

CAMEROON (Federal Republic of)

L.T: GMT+1 h – **Pr.L:** French, English, Vernaculars.
RADIODIFFUSION DU CAMEROUN (Gov.)
ADDR: B.P. 281, Yaounde. **Te:** 4635. **Cable:** "Radiocameroun". **L.P:** Federal Dir: A. Moutongo Black. Dir's: J. Atangana (French Dept.), D. Endeley (English Dept.). Dir.Tec: G. Mbape. Dir.Adm: J. Dipoko.

RADIO YAOUNDE (Nat. st.)
ADDR: B.P. 281, Yaounde. **Cable:** "Radio Yaounde". **Te:** 4635. **L.P:** Dir: J. Moudiki. Dir. French Prgr's: L. Kabouth. Dir. English Prgr's: A. Moma. Dir. N: Miss G. Epee.
STATIONS: m.w. 1kW, s.w. 4/30kW (G.C: 11.32E/03.51N).
1286kc 233m – 4972.5kc 60.33m – 6040kc 49.67m.
HOME SCE: Mon–Fri: 04.30–07.00 on 1286/4972.5kc, 11.00–14.00 on 1286/6040kc, 16.00–22.00 on 1286/4972.5kc. Sat: 05.30–07.00, 11.00–23.00 on 1286/4972.5kc (11.00–17.00 also 6040kc). Sun 05.00–23.00 on 1286/4972.5kc (06.30–17.00 also 6040kc).
French: W 05.30–07.00, 11.00–13.00, 17.00–19.00, 19.20–22.00. Sat 05.30–07.00, 11.00–13.30, 14.45–19.00, 19.20–23.00. Sun 06.30–13.30, 15.15–19.00, 19.20–23.00. **English:** W 04.30–05.30, 13.00–14.00, 16.00–17.00, 19.00–19.20. Sat 04.30–05.30, 13.30–14.45, 19.00–19.20. Sun 05.00–06.30, 13.30–15.15, 19.00–19.20, **Vernaculars:** Tues 17.00–17.30 (Ewondo); Wed 17.00–17.30 (Bamiléké).
N: French: W 06.15, 12.00 (Sat 12.15), 19.00. Sun 07.00, 12.00, 19.00. **English:** W 04.45, 13.30, 19.00. Sun 06.00, 14.00, 19.00. **ANN:** "Ici Yaoundé, Radiodiff. de la République Fédérale du Cameroun, Poste National" – E: "This is Yaoundé the Nat. Broadc. System of the Federal Rep. of Cameroon" – **INT-SIG:** Local music on balafon. V. by QSL-card or letter. Rp. Re. in English, French.

RADIO DOUALA (Gov.)
ADDR: B.P. 986, Douala. **Cable:** Radio Douala. **Te:** 4575 – **L.P:** St. Dir: M. Ndongo Onana. Dir. Tec: J. Nkembe. Dir. Prgr: A. Ngangue.
STATIONS (G.C: 09.41E/04.04N):
1448kc 207.2m 0.1kW – 6115kc 49.06m 1kW.
HOME SCE. in French, Vernaculars: W 05.00–07.00, 11.00–13.45, 17.00–22.00 (Sat 11.00–23.00). Sun 05.00–23.00 – **N in French & English** relayed from R. Yaounde – **Vernaculars:** Mon–Fri 05.05–05.45, 17.00–17.30 (Douala: Mon–Fri, Ewondo: Tues, Bamiléké: Wed, Bassa: Thurs).
ANN: F: "Ici Douala, Radiodiff. du Cameroun" – **INT-SIG:** At opening and close down and 11.15 and 17.00: Hymn of Cameroon: "O Cameroun berceau de nos ancetrês" fanfare.



V. by QSL-card or letter. Rp – **PUB:** Prgr.sched. (weekly).

RADIO GAROUA (Gov.)
ADDR: B.P. 103, Garoua. **Te:** 012 – **L.P:** Dir: B. Malgana. Dir. Tec: J. Mbiangué. Dir. Prgr: L.P. Bassilekin.
STATIONS: mw 1kW, sw 4/30kW (G.C: 13.25E/09.18N)
1348kc 222.0m – 5010kc 59.88m – 7240kc 41.44m.
HOME SCE in French, Hausa, Foulfouldé: W 11.15–13.15 (Thurs, Sat 13.00, Fri 14.00), 17.00–22.00. Sun 07.00–13.15, 16.00–22.00 – **French:** 11.15–12.15 (Sun 07.00–12.30), 17.00 (Sun 14.30)–19.30. **N:** 12.00, 19.00 – **Foulfouldé:** 12.15–13.15, 19.30–20.30. **N:** 12.15(W), 12.30(Sun) 19.30, 20.00(W) – **Hausa:** 20.30–21.30. **N:** 20.30, 21.00(Sun) – **Arabic (N):** 21.30 – **ANN:** "Ici Garoua, Radiodiff. de la Republique Fédérale du Cameroun" – **INT-SIG:** Flute & Tam-tam – V. by QSL-card Rp.

RADIO BUEA (Gov).
ADDR: Buea. Te: 625 – **L.P:** Dir: M. Neba-Fabs. Dir. Tec: Ch. Ndikintum – **STATION** (G.C: 09.14E/04.09N): 5984kc 50.13m 1kW.
HOME SCE. in English: 05.00–07.00 Sun 11.00), 13.30–21.30 – N (relayed from R. Yaounde): W 05.45, 13.30 (Sat 14.00), 18.30. Sun 06.00, 14.00, 18.30.

CANARY ISLANDS (Spanish)

L.T: GMT – **Pr.L:** Spanish.
RADIO NACIONAL DE ESPAÑA (Centro Emisor del Atlántico)
ADDR: Valentin Sanz 4, Pisos 5° y 6°, Sta. Cruz de Tenerife. **Te:** 244187. **L.P:** Dir: D. D. Manfredi Cano.
STATIONS: mw 100kW, sw 50kW:
620kc 483.9m – 9600kc 31.25m – 11800kc 25.42m.

D.Prgr: On 620kc: 06.45–00.15 – **N:** 07.00, 08.00, 09.00, 10.00, 11.00, 13.30, 15.00, 16.00, 17.00, 18.00, 21.00, 23.00, 24.00.
On 9600/11800kc: 20.00–04.00. **N:** 21.00, 23.00, 24.00.
ANN: "R. Nacional de España en Canaris, Centro Emisor del Atlántico" – **INT-SIG:** Marcha de "La Generala".

LA VOZ DE LA ISLA DE LA PALMA

ADDR: Emisora Sindical, Santa Cruz de la Palma. **Te:** 862. **Cable:** Voz Isla Palma – **L.P:** St. Dir: M. F. de Las Casas. Dir. Prgr's: G. Gómez F. Dir. Tec: A. Herrera P.
STATION: 1385kc 217m 0.4kW (to change to FM).
HOME SCE. in Spanish: 09.00–22.00. **N:** 09.10, 12.10, 13.30*, 14.15, 21.00*. (*=rel. R.N.E.) – **ANN:** "La Voz de la Isla de la Palma Emisora Sindical, Santa Cruz de la Palma" – **INT-SIG:** "La Orgia Dorada" (Military March) – **V.** by letter. Recordings accepted.

RADIO ATLANTICO (Comm.)

ADDR: Ca. General Franco 50, Las Palmas. **Te:** 221083. **Cable:** Radio Atlantico. **L.P:** Dir: J. A. Gutierrez P.
STATIONS: 1097kc 273.5m 20kW – **FM:** 88.7Mc 1kW.
HOME SCE. in Spanish: D 06.55–01.00. **N:** 07.30, 08.00, 08.45, 12.00, 13.30, 14.00, 18.00, 20.00, 21.00, 24.00 (relay R. Nacional exc. 08.45, 14.00) – **ANN:** Sp: "Transmite R. Atlantico, E.C.S. no. 4, Emisora Sindical de las Palmas de Gran Canaria Islas Canarias". **INT-SIG:** Canary guitar chords – **V.** by QSL-card or letter. Recordings accepted.

RADIO LAS PALMAS (Comm.)

ADDR: Calle Triana 134, Dpdo, Las Palmas de Gran Canaria. **Te:** 220351. **Cable:** Radio Las Palmas – **L.P:** Dir. Prgr: J. M. Ayaso – **HOME SCE:** EAJ50 953kc 314.6m 10kW: 07.00–01.00.
N: 08.00, 08.30, 09.30, 13.30, 14.30, 21.00, 21.15(local).
ANN: "Transmite EAJ50 R. Las Palmas – **INT-SIG:** Pasodoble "Islas Canarias" – **V.** by QSL-card. Recordings accepted – **AD:** 10 min. per h.

RADIO CLUB TENERIFE (Cult.)

ADDR: Suárez Guerra 49, Santa Cruz de Tenerife. **Te:** 243542 – **L.P:** Pres: F. A. Acuña Dorta. Dir. Tec: P. Padrón Afonso.
STATION: EAJ43 1412kc 212.4m 1kW: 08.00–24.00. **ANN:** Sp: "Aqui R. Club Tenerife, emisora EAJ43, en Santa Cruz de Tenerife, Islas Canarias" – **INT-SIG:** 22.00 "Islas Canarias" – **V.** by letter.

RADIO JUVENTUD DE CANARIAS (C.A.R.)

ADDR: Castillo 27, Santa Cruz de Tenerife. **Te:** 243692 – **L.P:** Dir: D. M. A. Yanes Contreras.
STATION: EFJ57 872kc 344m 10kW – **HOME SCE:** 07.00–01.00.
ANN: "R. Juventud de Canarias" – **INT-SIG:** The first notes from "Tierra Canaria" – **V.** by letter.

RADIO POPULARDE GUIMAR

ADDR: San Pedro Ariba 4, Güimar (Tenerife).
STATION: EAK83 1133kc 264.8m 2kW – **HOME SCE:** 08.00–12.00, 13.00–19.00, 20.00–24.00 – **ANN:** "R. Popular de Güimar, Emisora diocesana, Villa de Güimar, Tenerife.

LA VOZ DEL VALLE DE LA OROTAVA

ADDR: Plaza del Ayuntamiento, Villa de la Orotava.
STATION: ESC25 1480kc 202.7m 0.4kW – **ANN:** "La Voz del Valle de la Orotava, Emisoras Sindical, la Orotava, Tenerife".

CAPE VERDE ISLANDS (Portuguese)

L.T: GMT−2 h – **Pr.L:** Portuguese, English.

REPARTIÇÃO PROVINCIAL DOS SERVIÇOS DOS CORREIOS, TELEGRAFOS E TELEFONES DE CABO VERDE, Praia.

L.P: Dir. de 2a classe dos CTTU: L. M. de Oliveira Santos.

RADIO CLUBE DE CABO VERDE (Pr.)

ADDR: C.P. 26, Praia. **Te:** 344. **Cable:** "Radio Clube". **L.P:** Pres: E. A. Victoria. Dir. Tec: H. S. Brito.
STATIONS: 3883kc 77.25m 5/0.5kW.
HOME SCE. in Portuguese: 14.15–16.15 (Sat 15.00–18.00, Sun 12.00–14.00) on 3883kc (0.5kW). D 20.00–22.00 on 3883kc (5kW). **N:** 15.30, 21.30. **Wrp:** 21.30 – **ANN:** "Aqui Praia Estação de Ondas Curtas do R. Clube de Cabo Verde" – **INT-SIG:** Five notes on Marimba – **V.** by QSL-card. Rp. Recordings accepted.

R. BARLAVENTO (Gov.)

ADDR: C.P. 29, S. Vicente – **L.P:** Dir. Gen: J. M. Povoa & A. L. da Silva. Mgr: A. C. Salomão. Dir. Tec: T. Barrio Vieira.
STATION: CR4AC 3910kc 76.73m 1kW.
HOME SCE: W 14.30–15.30, 22.00–24.00. Sun 11.00–13.00, 15.00–17.00, 22.00–24.00 – **N:** 14.30, 22.30.
ANN: "Aqui S. Vicente de Cabo Verde, Provincia Ultramarina de Portugal. Fala-vos CR4AC, estação de ondas curtas da R. Barlavento, que emite, diariamente, no comprimento de onda de 75m, freq. de 3910kc" – **INT-SIG:** Gong and "Cabo Verde Tetta Minha" (folklore) on accordeon – **V.** by QSL-card. Rp. Recordings accepted – **F.PL:** 100kW tr.

RADIO CLUBE MINDELO (Pr.)

ADDR: C.P. 101, S. Vicente. **Te:** 476. **L.P:** Pres: F. J. Martins. Secr: A. A. Azevedo. Dir. Tec: J. Azevedo.
STATION: CR4AB 4715kc (variable) 63.63m 0.25/0.45kW.
HOME SCE: W 07.30–08.30, 19.00–22.00; Sun 09.00–10.00, 12.00–14.00, 19.00–22.00. **N:** 21.30.
ANN: "Aqui R. Clube Mindelo estação de ondas curtas operando no comprimento de ondas de 63.53m freq. de 4715kc" – **V.** by QSL-card or letter. Recordings accepted. Prgr.schedule free.

CENTRAL AFRICAN REPUBLIC

L.T: GMT+1 h – **Pr.L:** French, Sango.

RADIODIFFUSION NATIONALE CENTRE-AFRICAINE

ADDR: P.B. 940, Bangui. **Te:** 2355 – **L.P:** Dir: V. Teteya. Dir. Tec: M. Mercier. Dir. N: H. Koba.
STATIONS: mw 1kW, sw 30kW (G.C: 18.35E/04.21N).
1570kc 190m – 5035kc 59.58m – 7220kc 41.55m.
HOME SCE. in French & Vernaculars:
Mon–Fri 04.30–06.30, 16.30–21.00 on 1570/5035kc, 11.00–12.30 on 1570/7220kc; Sat 04.30–06.30, 16.30–22.15 on 1570/5035kc, 11.00–16.30 on 1570/7220kc; Sun 06.00–16.30 on 1570/7220kc, 16.30–21.00 on 1570/5035kc.
N. in French: 05.00(W), 06.00(W), 09.00(Sun), 11.45, 18.30, 20.50.
N. in Sango: 05.30(W), 08.15(Sun), 12.10, 17.15 – **L.L (English):** Mon, Thurs 05.10, 17.00 – **Mbg:** Sun 17.30.
ANN: "Ici Bangui Radiodiff. Nationale Centrafricaine" – **INT-SIG:** First notes of the national anthem played on piano.
V. by QSL-card, Re. in French. Recordings accepted.

CHAD (Rep. of the)

L.T: GMT+1 h – **Pr.L:** French, Arabic, Sara.

RADIODIFFUSION NATIONALE TCHADIENNE (Gov.)

ADDR: B.P. 892, Fort Lamy. **Cable:** Radio Tchad. **Te:** 2273 – **L.P:** Dir: O. Touade. Dir. Tec: I. M. Amane. Dir. Prgr: A. Folly.
STATIONS (G.C: 15.03E/12.08N):
1538kc 195.0m 1kW – 7120kc 42.13m 30kW
4904kc 61.18m 30kW – 9615kc 31.20m 4kW
HOME SCE. in French, Arabic, Sara: W 04.30–06.00 on 1538/4904.5kc, 12.00–17.00 on 1538/7120/9615kc, 17.00–21.30(Sat 22.00) on 1538/4904.5kc. Sun 04.30–07.00 on 1538/4904.5kc, 07.00–17.00 on 1538/7120/9615kc, 17.00–21.30 on 1538/4904.5kc. **N: French:** 05.55, 12.30, 19.00, 21.15. **Sara:** 05.45, 15.00, 21.25. **Arabic:** 05.50, 18.00, 21.20.
ANN: "Ici Fort Lamy, Radiodiff. Nationale Tchadienne émettant dans les bandes..." or "Ici Fort Lamy, Radiodiff. Nationale Tchadienne" – **INT-SIG:** Balafon – **V.** by QSL card Rp. Recordings accepted – **F.PL:** Increase of Nat. net. through satellite st's. International net – **PUB:** Prgr.schedule (weekly).

COMORES ISLANDS (French)

L.T: GMT+3 h – **Pr.L:** French, Vernaculars.

OFFICE DE RADIODIF. TELEVISION FRANÇAISE (O.R.T.F.)

ADDR: B.P. 29, Dzaoudzi, Ile Mayotte, Comores. **Te:** 25 – **L.P:** Dir. Gen: A. Daumas. Dir. Tec: J. Carbonnel.
STATIONS (G.C: 45.17E/12.45S): 3331kc 90.06m – 7260kc 41.32m 4kW.
HOME SCE. in French, Comorian: W 03.30–05.00 on 3331kc, 09.00–10.30 on 7260kc, 15.30–19.00 on 3331kc. Sun 05.00–11.15 on 7260kc, 14.00–19.00 on 3331kc.
N: French: 04.00(W), 05.00(Sun), 09.30, 17.00 – **Comorian:** 03.45(W), 05.15(Sun), 17.15 – **Wrp:** 09.30 – **T.S:** 04.00(W), 09.30, 17.00(W) – **ANN:** "Vous êtes á l'ecoute de la station des Comores – Office de Radiodiff. Télévision Française" – **INT-SIG:** Folklore Music played on native instrument – **V.** by letter. Rp. Recordings accepted – **PUB:** Prgr. schedule (monthly).

CONGO (Dem. Rep. of)

L.T: Kinshasa, Mbandaka: GMT+1 h; Lubumbashi, Kisangani: GMT+2 h – **Pr.L:** French, Lingala, Kikongo, Tshiluba, Swahili.

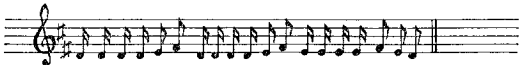
RADIODIFFUSION DE LA REPUBLIQUE DEMOCRATIQUE DU CONGO (Gov.)

ADDR: Nat. Service: B.P. 3171, Kinshasa. **Te:** 3171 – **L.P:** Dir: P. Makosso.
STATIONS (G.C: 15.18E/04.20S).

kc	m	kW	kc	m	kW	kc	m	kW
1331	225	1	6015	49.88	10	11790	25.45	100
4880	61.48	10	7170	41.84	10	FM:	90Mc	0.25

NATIONAL PRGR: On 1331/6015/7170/11790kc+FM: Mon–Fri 04.00–07.30, 10.00–13.00, 15.00–23.00; Sat 04.00–23.00; Sun 04.00–07.30, 10.00–23.00. **N:** 04.30, 05.30, 06.30, 10.30, 11.30, 12.30, 16.30, 18.30, 19.30, 20.30, 22.45.

REG. PRGR: Addr: B.P. 3164, Kinshasa – L.P: Dir. M. Mwembiya. D.Prgr: 10.00–13.00, 15.00–22.00 (Sat/Sun 23.00).
ANN: Nat. Prgr: "Ici Kinshasa, Radiodiff. Nationale Congolaise". Reg. Prgr: "Ici Kinshasa, station interprovinciale de la Radiodiff. Congolaise". INT-SIG: Tam Tam (native xylophone bect).



REGIONAL STATIONS (in French and reg. languages):
R. Mbandaka: Addr: B.P. 1061, Mbandaka. L.P: St. Mgr: C. Bo-Kongoma – 5993kc 50.05m 10kW: 05.00–07.30, 10.00–13.00, 15.30–21.00.
N. in French: 05.45, 11.45, 18.45 – Ann: "Ici Mbandaka, Radiodiff. Nationale Congolaise, station interprovinciale" – V. by letter or QSL-card. Rp. Recordings accepted.
R. Bukavu: Addr: B.P. 475, Bukavu – L.P: Dir. E. Kinyongo. 4889kc 61.04m 10kW: 04.00–06.30, 10.30–13.00, 14.30–21.00.
R. Kasai: Addr: B.P. 708, Luluabourg – L.P: Dir: J. R. Tshimanga. Station: 6125kc 48.98m 10kW: 04.00–06.30, 10.00–13.00, 15.00–20.00.
N. in French: 04.50, 05.30*, 10.30*, 17.00, 18.30*, 19.45. *=rel. Kinshasa – Ann: "Ici Luluabourg, station Interprovinciale du Kasai Occidental" – V. by letter. Rp. Recordings accepted.
R. Kisangani: Addr: B.P. 1745, Kisangani – L.P: Dir: M. Flamend. 6085kc 49.30m 10kW: 04.00–06.30, 10.00–13.30, 15.00–20.00.
R. Mbuji-Mayi: Addr: B.P. 2132, Mbuji-Mayi – L.P: Dir: J. Madimba. 7295kc 41.12m 20kW: 10.00–13.00, 15.30–20.00.
R. Lubumbashi: Addr: B.P. 1152, Lumbumbashi – L.P: Dir: L. M'-vumbi.
Stations (G.C: 27.32E/11.41S):

kc	m	kW	kc	m	kW	kc	m	kW
4750	63.16	10	7165	41.87	10	*11865	25.28	100
5960	50.34	10	9540	31.45	20			

*=variable; Highest freq: 11955kc, lowest 11860kc.
Home Sce. in Kiswahili, French, Tshiluba: 04.00–07.00(Sun 08.00), 10.00–12.00(Sat/Sun 13.00), 14.30–20.00(Sat 21.00) on 4750/5960/7165/9540kc – N. in French: 05.30, 06.30, 10.30, 11.30(Sat/Sun only), 16.30, 18.30. Kiswahili: 05.00, 11.00, 16.00.
Foreign Sce. (La Voix de la Fraternité Africaine) in French, Swahili, English: 15.00–21.00 on 11865kc – N: French: 18.00, 20.00. Swahili: 17.00. English: 19.00 – Int-Sig: Home & Foreign Sce's: as Kinshasa. Ann: Home Sce: "Ici Lubumbashi, station interprovinciale de la Radiodiff. Nationale Congolaise". Foreign Sce: "Ici Lubumbashi, la Voix de la Fraternité Africaine". E: This is the Voice of African Fraternity.

RADIO COLLEGE (Rlg-educ.)
ADDR: Collège S. Francois de Sales, B.P. 296, Lumbumbashi. Te: 3397 – L.P: Dir. Gen. R. R. PP. Salesiens. Dir. Tec: R. P. J. Dethier. Dir. of Prgr's: R. P. A. Ricard.
STATIONS (Systems: Bauer, Gates): 9Q2AC
1500kc 200m 1kW – 3390kc 88.50m 1kW – 5050kc 59.41m 1kW – 7200kc 41.67m 1kW – FM: 95Mc 0.05kW. (G.C: 22.32E/11.36.S)
HOME SCE. in French, Swahili, Kibemba: W 15.30–19.30, Sun 07.00–10.00, 18.30–19.30.
Catholic N: Sun 09.15, Mon/Wed/Fri 18.30 – Two prgr's are radiated simultaneously Mon–Fri at 16.00–17.00: Blue Prgr on 1500/5050kc, Green Prgr. on 3390/7200kc. + FM: 95Mc.
ANN: "Ici R. Collège, station de radiodiff. privée" – INT-SIG: At opening "Marche du Baron Tzigane" (by Joh. Strauss), at closing "Marche Indigo" (by Joh. Strauss) – V. by letter – PUB: Monthly prgr. bulletin – FI: by free will offerings.

RADIO LEO (Rlg-Educ)
Owned and operated by Collège Albert Ier – ADDR: B.P. 3165, Kinshasa-Kalina. Te: 5395. Cable: Provac – L.P: Dir. Gen. L. Rinen, S. J. Dir. Tec: M. van Damme.
STATION (G.C: 15.18E/04.20S): 9Q2AA 11720kc 25.60m 10 or 50kW – HOME SCE. in French: Sun 08.00–10.00 – ANN: "Ici Kinshasa, Rép. Democratique du Congo, st. privée du Collège Albert Ier, longueur d'ondes 25m60 ou 11720kc" – INT-SIG: First movements of Andante non troppe of "Duo für Glasharmonika und Laute" in G minor by J. Naumann.

RADIODIFFUSION UFAC (Priv.)
ADDR: B.P. 97, Lumbumbashi. Cable: UFAC – L.P: Dir. Gen. J. Freart. St. Mgr: C. Jean. Dir. Tec: S. Daniel.
STATION: 9Q2AD 4990kc 60.12m 9kW (variable: lowest freq 4970kc, highest 5075kc)
HOME SCE: English: Mon, Wed, Fri 16.30–17.00, 20.00–20.30; Tues, Thurs, Sat, Sun 16.00–17.00, 19.30–20.30 – Dutch: Thurs 17.30–19.20 – Swahili: Sun 15.30–16.00 – French: W 15.45–16.00 (Mon, Wed, Fri 16.30), 17.00–17.30(D), 17.30–19.30(exc Thurs), 19.30–20.00 (Mon, Wed, Fri). Sun 11.00–15.30, 17.00–19.30.
ANN: F: "Ici Radiodiff. UFAC a Lumbumbashi, Rep. Democratique Congo". E: "This is R. UFAC at Lumbumbashi, Democratic Republic of Congo". V. by letter. Re. in E or F.

CONGO (Rep.)

L.T: GMT+1 h – Pr.L: French, English, Portuguese.
RADIO BRAZZAVILLE (O.R.T.F.)
ADDR: B.P. 108, Brazzaville. Te: 2234. Cable: Radiodiffusion. L.P: St. Mgr: Jean Delannoy. Dir. Tec: P. Simon.
STATIONS (G.C: 15.18E/04.15S).

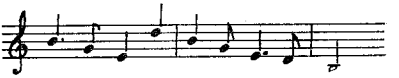
kc	m	kW	kc	m	kW	kc	m	kW
3232	92.82	1.5	11710	25.62	50	15190	19.75	50
4795	62.57	4	11725	25.58	50	15445	19.43	50
5970	50.25	4	11930	25.15	50	17720	16.93	50
7105	42.22	4	11970	25.06	4	21500	13.90	2/50
9730	30.83	15						

INTERNATIONAL SERVICE:
I=Africa; II=Madagascar; III=Far East. * 2kW; ** Sun only.

Times	Areas	kc	N
05.00–07.30	I+II	3232/4795/5970 } 9730/11725/15445 }	F: 05.00, 06.00, 07.00 E: 05.15, 06.15
11.00–12.00	I	11970/15445	E: 11.00, P: 11.45
11.00–12.55	I+II	3232/7105/11710/15190 21500*	F: 11.30, 12.30
13.00–14.00	III	11720/21500	E: 13.00, F: 13.30
14.00–17.00**	I+III	3232/7105/11710/17720 21500	"Sport & Music"
17.30–21.00	I+II	3232/5970/7105/9730 11930/15190	F: 17.30, 18.05 19.00, 20.30 P: 18.45, E: 19.15

ANN: F: "Office de Radiodiff. Télévision Française émettant de Brazzaville". E: "This is the O.R.T.F. speaking to you from Brazzaville". P: "Aqui Brazzavilla, Servicio do Radiodiffusion Television Francesa".
INT-SIG: Five different notes played on a native instrument (Kizanzi) consisting of several vibrating iron bars attached to a wooden box. V. by QSL-card or letter. RP – PUB: Prgr. sched. free.

RADIODIFFUSION TELEVISION CONGOLAISE (Gov.)
ADDR: B.P. 2241, Brazzaville. Te: 4334. Cable: Radio Congo – L.P: Dir: A. M. Samba. Dir. Tec: M. Fournier. Dir. Prgr: G. Menga.
STATION (G.C: 15.18E/04.15S):
1484kc 202.2m 4kW – 3264kc 91.90m 4kW – 4843kc 61.95m 25kW – 7175kc 41.81m 25kW – 9715kc 30.66m 50kW
HOME SCE. in French, Lingala, Munukutuba: W 04.30-06.30 on 1484/3264/4843kc, 11.00–13.00 on 1484/7175kc, 15.30–21.00(Sat 22.00) on 1484/3264/4843kc. Sun 04.30–07.00 on 1484/3264/4843kc, 07.00–17.00 on 1484/7175kc, 17.00–21.00 on 1484/3264/4843kc. On 9715kc: D 17.00–19.00. N. French: 04.45, 05.30, 09.15(Sun), 12.00, 17.00(W), 17.15(Sun), 18.30, 20.45. N. in Lingala/Kikongo: 11.15, 17.15(W), 17.30(Sun), 17.45(Sun) – ANN: "Ici la voix de la Revolution Congolaise émettant de Brazzaville".
V. by QSL-card. Rp. Recordings accepted – INT-SIG: Zanzi solo (native instrument).



DAHOMEY (Republic)

L.T: GMT+1 h – Pr.L: French, Vernaculars.
RADIODIFFUSION DU DAHOMEY (Gov.)
ADDR: B.P. 366, Cotonou. Cable: Radiodahomey. Te: 2040. Telex: 208 – L.P: Dir: H. da Piedade.
STATIONS: *Parakou.

1475 kc	203.4 m	1 kW	–	3270 kc	91.74 m	4 kW
*1598 kc	188.0 m	0.1 kW	–	4870 kc	61.60 m	30 kW

HOME SCE. in French, Fon, Yoruba, Dendi, Bariba, Mina: Mon–Fri 05.15–06.45, 11.15–12.45(Thurs 13.00), 16.45–22.00; Sat 05.15–06.45, 12.00–23.00; Sun 07.00–22.00 – N: French: W 05.35, 06.15, 11.40 (not Sat), 12.40(Thurs 12.55), 15.00(Sat), 16.45, 19.00, 21.15, 21.55, 22.15 (Sat). Sun 08.00, 11.40, 14.00, 17.00, 19.00, 21.55. Vernaculars: 12.10 12.25 (Sat 13.10–13.25), 16.50–18.25 (Sun 17.15–18.50).
ANN: French: "Ici Cotonou, Radiodiff. du Dahomey émettant sur..."
INT-SIG: Dahomey Tam-Tam – V. by QSL-card. Rp. Recordings accepted – PUB: Prgr.schedule (weekly) – ALF: 500 CFA.

EGYPT (United Arab Rep.)

L.T: GMT+2 h (Su 1/5–30/9 GMT+3 h) – Pr.L: Arabic.
U.A.R. BROADCASTING & TV CORPORATION (Gov.)
ADDR: Prgr. Authority: P.O. Box 1186, Cairo. Cable: "Kahiradio". Engineering Authority: P.O. Box 1186, Cairo. Cable: Cibrotev.
L.P: Prgr. Authorities: Chmn: A. H. El Hadidi. Gen. Contr. of Research and Intern. Rel: M. El-Bassiouni. English. Authorities: Pres. Eng. Authority: A. Zayan. Dir. Tec: A. Kandeel.

STATIONS: Medium Waves * 150/300/450kW.

	kc	m	kW		kc	m	kW
Cairo III	557	538.6	50	Cairo II	980	306.1	5
Beni Suef I	602	498.4	50	Minia	1079	278.0	5
Batra I	620	483.9	*	Luxor	1079	278.0	5
Asyut II	710	422.0	100	Sohag	1142	262.2	5
Cairo I	773	388.1	500	Assuan I	1178	254.7	10
Batra II	818	366.7	*	Quena	1178	254.7	10
Cairo V	872	344.0	50	Alexandria	1277	234.9	10
Cairo IV	926	324.0	10	Assuan II	1277	234.9	10

Short Waves: 50/70/90/100kW

kc	m	kc	m	kc	m	kc	m	kc	m
7050	42.55	9580	31.32	9755	30.76	11870	25.27	17690	16.96
7075	42.40	9585	31.30	9790	30.64	11915	25.18	17710	16.94
7215	41.58	9595	31.27	9815	30.57	11940	25.13	17725	16.93
7265	41.29	9605	31.23	11655	25.74	11980	25.04	17755	16.90
9460	31.76	9615	31.20	11710	25.62	15135	19.82	17785	16.87
9475	31.66	9640	31.12	11745	25.54	15210	19.72	17805	16.85
9495	31.60	9685	30.98	11805	25.41	15260	19.66	17865	16.79
9515	31.53	9700	30.94	11825	25.37	15360	19.53	17920	16.74
9550	31.41	9715	30.88	11855	25.31	15475	19.39		

HOME SERVICE

MAIN ARABIC PRGR: *=Fri; **=Tues.
03.55–06.00 on 818/980/1079/1142/1178/1277/**7075/11940/15475kc.**
06.00–07.00 on 818/980/1079/1142/1178/1277/**9700/11940/15475kc.**
07.00–08.00 on 818/872**/980/1079/1142/1178/1277/**9700/11940/15475kc.**
08.00–10.00 on 818/872**/980/1079*/1142/1178*/1277/**7075*/9700/11940/15475kc.**
10.00–11.00 on 818/872**/980/1079*/1142/1178*/1277/**7075/9700/11940/15475***kc.**
11.00–13.00 on 818/980/1079/1142/1178/1277/**7075/9700/11940/15475kc.**
13.00–23.55 on 818/980/1079/1142/1178/1277/**9790/11940/15475kc.**
N: 05.00, 12.30, 15.00, 18.30, 21.00, 23.30 – **Comm:** 12.45, 15.30, 18.45. **T.S:** Cairo University Clock at the beginning of the main news bulletins.

VOICE OF ARABS:
03.00–08.00 on 620/1178/7050/9460/11745kc, 08.00–10.00 on 710/1178/7050/11745kc, 10.00–14.00 on 620/710**/1178/7050/11745kc, 14.00–00.15 on 620/1178/7050/9495/9550/11745kc.
N. Comm: 03.30, 04.00, 04.30, 11.30, 15.00, 16.00, 17.00, 18.00, 20.30, 23.00, 00.30 – **Palestine Prgr:** 06.00–08.00, 14.00–15.00.

SOUDANESE PRGR: 04.00–06.00 on 710/11915kc, 12.00–16.25 on 872/9475/11915kc – **N. & Commentary:** 03.00, 04.15, 12.30, 14.30.

SECOND PRGR. (Cultural): 19.30–22.30 on 872kc.

POPULAR CULTURAL PRGR: 14.00–23.30 on 710kc – **N:** 14.30, 16.45, 22.30.

ALEXANDRIA REG. PRGR: 15.00–22.00 on 1277kc – **N:** D 17.30, 19.30.

FOREIGN LANGUAGE PRGR. (Local Service) on 557kc.
05.00–08.30, 08.30–10.30 (Fri & Sun only), 10.30–14.00, 17.00–22.30 (Thurs, Sat 23.00) – **N. Comm: English:** 05.30, 12.30, 18.00 – **French:** 06.00, 12.00, 19.00 – **German:** 05.45 – **Greek:** 05.00, 13.00 – **Italian:** 05.15.

KORAAN PRGR. 04.00–09.00 & 12.00–21.00 on 1155/9585kc.

MIDDLE EAST COMM. PRGR: 04.00–06.00 on 872kc, 12.00–16.25 on 773kc, 16.30–19.25 on 872kc, 19.30–22.00 on 773kc – **N. Comm:** 05.00, 13.00, 15.00, 16.00, 17.00, 18.00, 19.00, 20.00, 21.00.

FOREIGN SERVICE

TO SO. EA. ASIA: 10.00–12.00 on 17920kc (Arabic); 11.15–14.30 on 17850kc (Indonesian 11.15, Malay 12.30, Thai 13.30).

TO SO. ASIA: 11.00–14.30 on 17690kc (Bengali 11.00, Hindi 12.00, **English:** 13.00); 12.30–13.45 on 11655kc (Urdu).

TO EA. AFRICA: 15.00–17.00 on 17690kc (Arabic 15.00, Somali 16.00); 15.00–17.00 on 17785kc (Swahili); 16.30–17.30 on 9475/11915kc (Amharic).

TO CE. AFRICA: 17.00–20.15 on 17690kc (Shona 17.00, Sindebele 17.45, Nyanja 18.15, Lingala 18.45, **English:** 19.30).

TO SO. AFRICA: 17.00–19.00 on 17785kc (Sesotho 17.00, Zulu 17.30, Portuguese 18.00).

TO WE. AFRICA: 19.15–22.15 on 15135kc (Hausa 19.15, **English** 20.45); 19.30–23.00 on 17920kc (Yoruba 19.30, Ibo 20.15, Foulani 21.00, Arabic 22.00); 20.30–23.00 on 17690kc (French 20.30, Arabic 22.00).

TO MIDDLE EAST: 13.45–17.45 on 11655kc (Pushtu 13.45, Persian 14.45, Kurdish 16.45); 18.00–19.00 on 9605kc (Turkish).

TO EUROPE: 17.45–23.15 on 9475/11965kc (Arabic 17.45, Italian 18.30, French 19.30, German 20.30, **English** 21.45).

TO SO. AMERICA: 22.30–01.30 on 11980kc (Arabic 22.30, Portuguese 23.30, Spanish 00.30).

TO NO. AMERICA: 00.30–04.00 on 9475kc (Spanish 00.30, English 01.30, Arabic 03.00).

DICTATION NEWS: 06.00–06.30 Arabic, 06.30–07.00 English on 7075/11915kc; 13.30–13.50 Arabic on 7075/9495kc.

INT-SIG: Camel Bells – **V.** Re. wanted. They are answered by QSL-card. Reports should be addressed to Propagation & Monitoring Dept. U.A.R. Broadcasting and TV, P.O. Box 1186, Cairo – **PUB:** Prgr. schedules four times per year. Weekly and quarterly magazines in Arabic – **FI:** by state subsidy, adv, Electric current taxes – **AD:** allowed in popular cultural prgr, Alexandria local prgr. & Middle East prgr.

ETHIOPIA

L.T: GMT+3 h – **Pr.L:** Amharic, Arabic, English, Somali.

RADIO ETHIOPIA (Gov.)
ADDR: R. Division, Ministry of Information, P.O. Box 1364, Addis Ababa. **Te:** 15933. **Cable:** Ethiopress – **L.P:** Dir. Gen: N. Haptewold. Dir. Tec: B. Desta. Tech. Supervisor: T. Y. Dafla.
STATIONS: *Asmara, **Harrar. Others: Addis Ababa.

kc	m	kW	kc	m	kW	kc	m	kW
**840	357.1	100	5056	50.33	10	7265	41.29	10
870	345.0	100	6185	48.50	100	9610	31.22	10
*940	319.1	50 (G.C: 38.43E/08.58N).						

HOME SCE: Amharic: 04.30–05.30 on 840/870/940/6185/7265kc, 11.00–12.00 as 04.30 plus 9610kc, 16.30–17.00 on 840/6185kc, 17.00–20.00 on 840/870/940/6185kc – **Arabic:** 15.00–16.00 on 840/870/940/6185kc – **English:** 10.15–11.00 on 840/870/940/6185/9610kc, 16.00–17.00 on 870/940/7265kc – **Somali:** 03.45–04.30 on 840/870/6185/7265kc, 12.00–13.00 on 840/870/6185kc, 16.00–16.30 on 840/6185kc.
ANN: E: "This is the Internal Service of R. Ethiopia". F: "Ici R. Ethiopie". Amharic: "Yih ye Ethiopia R. New". Somali: "Halkani wa R. Ethiopia". Arabic: "Huna saut Ethiopia".
V. by QSL-card. Re. in E, F or Amharic – **Pub:** Ethiopian Broadc. Sc's Prgr. schedule (twice a year) – **AD:** After N in all languages.

RADIO VOICE OF THE GOSPEL – LUTHERAN WORLD FEDERATION BROADCASTING SERVICE (Educ, Rlg.)
ADDR: P.O. Box 654, Addis Ababa. **Cable:** Lutherworld. **Te:** PBX 47190.
L.P: Dir. Gen: Dr. Sigurd Aske. St. Mgr: P. M. Volz. Dir. Prgr: U. Fick. Dir. Tec: E. Kraemer. Adm: T. Månson. Chm of the Board: Dr. Franklin Clark Fry.

STATIONS (G.C: 38.38E/08.47N): 2×100kW tr's:

kc	m	kc	m	kc	m	kc	m
6065	49.46	11785	25.46	11925	25.16	15400	19.48
9565	31.36	11810	25.40	15115	19.85	15410	19.47
9660	31.06	11825	25.37	15240	19.69	15425	19.45
9705	30.91	11890	25.23	15315	19.59		

Schedule: November 66–February 67:

Times	kc	Areas	Language
03.30–04.25	11890	Madagascar	Malagasy, French
03.30–04.25	9660	Ea. Africa	Swahili, **English**
04.30–04.55	11810	So. Africa	**English**
04.30–06.00	15400	We. Arab	Arabic
05.00–05.25	11785	Congo	French
05.30–05.55	11785	We. Africa	**English**
13.00–13.25	15410	Ceylon	Sinhalese
13.30–14.25	15410	India	**English**, Tamil
13.45–14.00	15315	India	**English**
14.00–14.25	15315	India	**Telugu**
14.30–14.55	15315	India	Hindi
14.30–15.55	15425	Ea. Arab	Arabic
15.00–15.55	15240	Madagascar	Malagasy
16.00–16.25	15425	Iran	Farsi
16.00–17.10	6065	Ethiopia	Amharic, **English**
16.30–17.10	11925	Malawi	**English**, Kinyanja
17.15–18.10	9565	Ea. Africa	Swahili, **English**
17.15–19.45	15115	We. Africa	*
18.15–19.10	9705	So. Africa	**
19.15–19.45	11825	Congo	French

* French, Fulani, Hausa, English – ** Zulu, Sotho, Afrikaans, English.
N: English: 05.30, 13.30, 13.45, 16.30, 17.00, 18.00, 19.00. **French:** 04.15, 05.00, 17.15, 19.15. **Amharic:** 16.00. **Swahili:** 17.30. **Medium Wave Sce.** (for Addis Ababa): 15.00–20.00 on 995kc 1kW.
N: English: 15.45, 17.30, 19.00. **French:** 17.15. **Amharic:** 16.00, 18.30.
ANN: "This is R. Voice of the Gospel, ETLF, Addis Ababa, Ethiopia" – **INT-SIG:** First four notes of "A Mighty Fortress" on drums – **V.** by QSL-card. Recordings accepted – **PUB:** Newsletter (4 times a year).

GABON (Republic)

L.T: GMT+1 h – Pr.L: French.
RADIODIFFUSION TELEVISION GABONAISE (Gov.)
ADDR: B.P. 150, Libreville. Te: 3325. Cable: Radio-Gabon. L.P: Dir. Gen: P. Okumba.
STATIONS (G.C. 09.26E/00.25N):
1313kc 228.5m 1kW – 4777kc 62.80m 30kW
1520kc 197.3m 1kW – 7270kc 41.27m 30kW
HOME SCE. in French: Nat. Net: W 05.00–06.30 on 1520/4777kc, 10.30–13.30 on 1520/7270kc, 17.30–21.30 (Sat 10.30–23.00) on 1520/4777kc. Sun 07.00–17.00 on 1520/7270kc, 17.00–21.30 on 1520/4777kc – N: 05.45(W), 07.45(Sun), 10.30(W) 11.45, 13.25(W), 18.30, 20.55. Reg. Netw: D 19.00–21.30 on 1313kc – ANN: "Radiodiff. Télévision Gabonaise émettant de Libreville et Franceville" – V. by QSL-card/letter. – F.PL: Reg. st's at Oyem, Port-Gentil, sw-st using the 3Mc band – PUB: Prgr. schedule (weekly).

RADIO FRANCEVILLE (Gov.)
ADDR: B.P. 36, Franceville – STATIONS (G.C: 13.16E/01.32S) 1250kc 240m 0.1kW – 6030kc 49.75m 4kW: Rel. Libreville.

GAMBIA (British)

L.T: GMT – Pr.L: English, Mandinka, Wolloff, Vernaculars.
RADIO GAMBIA (Gov.)
ADDR: Bathurst. Te: 693. Cable: "Broadcasts" – L.P: Broadc. Officer: A. M. Lowe, M.B.E. Dir. Tec: P. J. Warren.
STATION: (System: Marconi): 4820kc 62.24m 3.1kW.
HOME SCE. in English, Wolloff, Mandinka: Mon–Fri 17.10–20.30. N. in English: 18.00(BBC), 18.09(local), 20.00(BBC). N. in Wolloff: 18.17. N. in Mandinka: 18.27.
ANN: E: "This is R. Gambia broadc. from Bathurst on a freq. of 4820kc in the 60 m.b." – INT-SIG: Music played on the cora, an indigenous harp-like instrument – V. by letter. Re. in E, F or Arabic. Recordings accepted – PUB: Prgr.schedules occ.

GHANA

L.T: GMT – Pr.L: Akan, Ewe, Dagbani, Ga, Hausa, Nzema.
GHANA RADIO AND TELEVISION CORPORATION
ADDR: Broadc. House, P.O. Box 1633, Accra. Cable: Broadcasts. Te: 77551 – L.P: Dep. Dir. Gen: E. Adjorlolo. Dir. of Broadc. W. F. Coleman, B.Sc, M.I.E.E, M.B.E. Eng-in-Chief: J. K. Asare. B.Sc. A.M.I.E.E. Head of Nat. Sce: E. Sam, BA. Head of External Sce: J. Asmah B.Sc.

STATIONS:

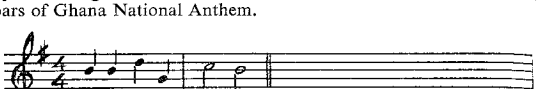
kc	m	kc	m	kc	m	kc	m
3240	92.60	6030	49.75	9690	30.96	15285	19.63
3280	91.45	6070	49.42	9760	30.74	17910	16.75
3350	89.56	6110	49.10	11735	25.56	21545	13.92
3366	89.13	6130	48.94	11800	25.42	21690	13.83
4980	60.25	9545	31.43	15190	19.75	21720	13.81
4915	61.03						

NATIONAL SCE: 1×20kW tr, 2×10kW tr's at Accra (G.C: 00.10E/05.31N); 6×10kW tr's at Ejura (G.C: 00.00E/05.33N).
05.30–09.00 on 3350/3366/4915/4980kc, 09.00–16.00 on 4915/4980kc, 16.00–23.00 on 3350/3366/4915/4980kc.
N: English: 06.00, 07.00, 11.00, 13.00, 14.00, 18.00, 20.00, 21.00. Ghana languages: 06.30, 07.30, 14.30, 15.30, 19.15.
EXTERNAL SCE: 4×100kW tr's at Tema (G.C: 00.01E/05.42N). 2×250kW tr's at Ejura (G.C: 00.00E/05.33N).
Areas: I=No.Am; II=Caribbean; III=So. Af; IV=Ce. Af; V=Australasia; VI=Ethiopia/Somalia/Sudan/India/Pakistan; VII=Japan/China; VIII=F. East; IX=We.Af; X=Europe; XI=Ea. Af; XII=Congo/Malagasy; XIII=Angola/Mozambique; XIV=S. Am; XV=M. East/Sudan/U.A.R.; XVI=No. Af.

Arabic	kc	Area
04.00–04.45	6130	XV
16.00–16.45	21545	XV
20.00–20.45	9545	XVI
Bambara		
06.00–06.45	6070	IX
16.45–17.30	6070	IX
English		
03.00–03.45	6130	VII
	6070	XI
03.30–04.30	6110	I
04.30–05.15	9760	III
	9545	VIII
05.30–07.30	3240	IX
06.00–06.45	9760	IV

English	kc	Area
07.15–08.00	9545	X
13.30–14.30	17910	VIII/XI
14.00–22.15	6130	IX
	4980	IX
15.00–15.45	17910	V
	21545	III
	21720	XI
16.45–17.30	15285	XI
18.15–19.00	15285	VIII/XI
20.00–21.00	9760	II
	11800	II
20.45–22.15	9545	X
French		
03.45–04.30	6070	XII
06.00–06.45	9690	XII
French	kc	Area
06.00–07.30	3280	IX
17.30–18.15	11800	XII
	6070	IX
19.00–19.45	11800	XII
	9545	X
19.00–22.15	6070	IX
Hausa		
05.15–06.00	6070	IX
15.00–16.30	6070	IX
Hausa	kc	Area
18.15–19.00	6070	IX
Portuguese		
14.00–14.45	21545	XIII
17.00–17.45	21545	XIII
Swahili		
05.00–05.45	9690	XI
13.30–14.30	21720	XI
15.45–16.45	21720	XI
17.30–18.15	15285	XI

NEWS: English: 03.00, 03.30, 04.30, 05.30, 06.00, 07.15, 13.30, 14.00, 15.00, 16.00, 16.45, 17.00, 18.00, 18.15, 20.00, 20.45, 21.00, 22.00 – French: 03.45, 06.00, 07.00, 17.30, 19.00, 20.00, 21.00 – Portuguese: 14.00, 17.00 – Hausa: 05.20, 15.00, 16.00, 18.15 – Arabic: 04.05, 16.00, 20.00 – Swahili: 05.00, 13.30, 15.45, 17.30 – Bambara: 06.00, 16.45.
ANN: "This is the Nat. Sce. of the Ghana Broadc. Corpo." preceded by drumming or "This is R. Ghana" – INT-SIG: Guitar: First few bars of Ghana National Anthem.



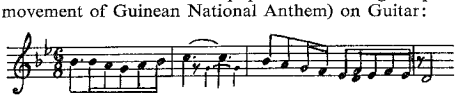
V. by QSL-card and letter. Re. on technical matters to Propagation Eng, on prgr's to Head or External Sce. Recordings accepted – PUB: "The Broadcaster" (monthly) "Radio Review & TV Times" (weekly), External Service schedule – FI: By appropriation and subscriptions from wired broadc.

GUINEA (Republic)

L.T: GMT – Pr.L: French, Vernaculars.
RADIODIFFUSION NATIONALE (Gov.)
ADDR: B.P. 617, Conakry. Cable: Radio Guinée. Te: 3366.
STATIONS: (G.C: 13.40W/09.32N):

kc	m	kW	kc	m	kW	kc	m	kW	kc	m	kW
1403	213.8	4	3385	88.63	50	6155	48.74	18	9650	31.09	50
3376*	88.89	50	4910*	61.10	18	7125*	42.11	18	11965*	25.07	50

*=not in use during rain season (June–October).
HOME SCE. in French, National languages, English, Creole-English, Arabic, Portuguese, Creole-Portuguese, Ouolof, Bambara, Mandjake: W 06.00–08.00, 12.30–13.30, 16.00–24.00, Sun 08.00–14.00, 16.00–24.00. On 1403/4910kc: as above. On 3385kc: 16.00–24.00. On 6155kc: W 12.30–13.30, Sun 08.00–14.00. On 9650kc: W 06.00–08.00, D 16.00–24.00.
ANN: F: "Ici la Voix de la Revolution (before news)" or "Ici Conakry, Radiodiff. Nationale" or "Ici Conakry Radiodiff. de la Republique de Guinee". E: "Here is the Voice of the Revolution".
INT-SIG: First movement of the popular heroic song "Alpha Yaya" (first movement of Guinean National Anthem) on Guitar:



V. by letter.

GUINEA (Portuguese)

L.T: GMT – 1 h – Pr.L: Portuguese.
EMISSORA PROVINCIAL DA GUINE (Gov.)
ADDR: Av. da República, Bissau – L.P: Pres: A. Henrique Salgado.
STATIONS (G.C: 15.35W/11.51N): 1050kc 285.0m 1kW – 5041kc 59.50m 10kW.
HOME SCE: 12.00(Sun 10.00)–15.00, 18.00–24.00. N: 14.00, 20.00, 21.30, 23.45 – ANN: "Fala Portugal através da Emissora provincial da Guiné Portuguesa, a transmitir em ondas medias, no comprimento de 285m. frq. de 1050kc, e em ondas curtas, em 60m, freq. de 5041kc.
INT-SIG: Guitar – V. by QSL-card or letter. Recordings accepted.
ALF: Esc. 100.-

GUINEA (Spanish)

L.T: GMT+1 h – Pr.L: Spanish.
EMISORA DE RADIODIFUSION SANTA ISABEL (Gov.)
ADDR: Apt. 195, Santa Isabel, Fernando Póo. Te: 382 – L.P: Dir. Gen: S. Corredoira Casares.
STATION: 6250kc 48.00m 5kW.
HOME SCE. in Spanish, Pamue, Bubi, Annobonés: 07.00–23.00. Spanish: 07.00–16.00, 19.45–23.00. N: 06.45, 13.20, 20.30, 21.00(rel. RNE). Annobonés: 16.00–16.30. Pamue: 16.30–18.00. Bubi: 18.00–19.00. English: 19.00–19.45 – ANN: "Desde la isla de Fernando Póo, transmite EAJ205 R. Santa Isabel" – INT-SIG: "Los Voluntarios" – V. by letter.

RADIO VOICE OF THE GOSPEL

The Lutheran World Federation Broadcasting Service

daily broadcasts in –

Afrikaans, Amharic, Arabic, English, French, Fulani, Hausa, Hindi, Malagasy, Persian, Sinhalese, Sotho, Swahili, Tamil, Telugu, Zulu

beamed to –

Africa
India
Middle East

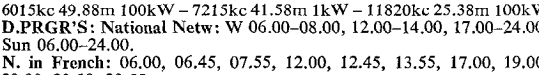
Write to:
Station ETLF
Box 654
Addis Ababa, Ethiopia

ETLF

RADIO ECUATORIAL (Gov. Comm.)
ADDR: Apt. 57, Bata, Provincia de Rio Muni. **Te:** 182. **Cable:** Radio Bata – **L.P:** Dir. E. E. Navarro Mañez.
STATION: EAJ206 4926kc 60.90m 5kW.
HOME SCE. in Spanish: W 07.00–16.00, 18.00–22.00(Sat 00.30). Sun 07.00–22.00 – **ANN:** "Transmite R. Ecuatorial Bata, La Voz de Rio Muni" – **INT-SIG:** Gong – **V.** by QSL-card and flag.

IVORY COAST (Republic)

L.T: GMT – **Pr.L:** French, Vernaculars.
RADIODIFFUSION TELEVISION IVORIENNE (Gov.)
ADDR: B.P. 2261, Abidjan. **Te:** 23514. **Cable:** Radiocotivoire – **L.P:** Dir: E. Kouame. Dir. Tec: G. Tanoh.
STATIONS: National Netw: 1240kc 242m 1kW
3242kc 92.54m 25kW – 4940kc 60.73 10kW.
International Netw: 1493kc 201m 4kW
6015kc 49.88m 100kW – 7215kc 41.58m 1kW – 11820kc 25.38m 100kW
D.PRGR'S: National Netw: W 06.00–08.00, 12.00–14.00, 17.00–24.00. Sun 06.00–24.00.
N. in French: 06.00, 06.45, 07.55, 12.00, 12.45, 13.55, 17.00, 19.00, 20.00, 22.30, 23.55.
International Netw: 06.30–08.00 on 6015/7215kc, 12.00–14.00(Sun 08.00–18.00) on 7215/11820kc, 18.00–24.00 on 6015/7215kc. **N. in French:** 06.30, 07.15, 12.00, 12.45, 13.55, 18.00, 20.00, 22.30, 23.55. **English:** W 18.30–19.00. **Vernaculars:** (Dioula, Baouke): 17.00–19.00.
ANN: "Ici Abidjan, Radiodiff. Television Ivorienne, chaine nationale... or chaine internationale" – **INT-SIG:** Vibraphone.



V. by QSL-card. Rp. appreciated – **AD:** 1% of all prgr's.

KENYA

L.T: GMT+3 h – **Pr.L:** English, Swahili, Hindustani.
VOICE OF KENYA (Gov.)
ADDR: Box 30456 Nairobi. **Te:** 24211. **Cable:** Broadcasts – **L.P:** Dir: R. Koske, Chief Eng: R. J. Davey. Dir. Prgr's: S. Kikumu. Pub. Rel. Officer: W. M. Botela. Asst. Dir: J. R. Kangwana.

HOME SERVICES
General Sce. (English) from Nairobi: W 03.15–06.20, 09.15–11.00, 13.00–20.05; Sat 03.15–21.05; Sun 04.00–20.05.
750kc 400m 100kW: – **FM:** 95.1Mc 1kW: as above.
1286kc 233.3m 0.5kW: – 1304kc 230.1m 0.5kW: as above.
4885kc 61.41m 10kW: W 03.05–06.20, 13.00–20.05, Sat 03.15–06.15, 12.15–21.00, Sun 04.00–06.15, 12.45–20.05.
7240kc 41.44m 10kW: W 09.15–11.15, Sat 06.30–12.00, Sun 06.30–12.30.
N: 04.00, 06.00, 10.15, 11.00, 16.10 (Sat 16,00. Sun 17.00), 18.00, 18.10(W).

Nat. Sce. (Swahili) from Nairobi: 03.00(Sun 04.00)–20.15(Sat 21.00).
611kc 491m 100kW: – **FM:** 92.9Mc 1kW: as above.
1106kc 271.2m 0.5kW: – 1133kc 264.8m 0.5kW: as above.
4934kc 60.80m 10kW: 03.00–05.00, 14.30–20.00
7210kc 41.61m 10kW: 05.15(Sun 06.15)–14.15

Hindustani Sce. (Nairobi): W 03.45–05.00, 09.00–11.00, 13.00–19.30, Sat 03.45–05.00, 09.00–19.30; Sun 05.00–19.30.
1268kc 236.6m 50kW: as above.
4855kc 61.79m 5kW: 03.15–05.00, 14.30(Sat 13.15)–20.00, Sun 13.15–19.30.
7125kc 42.11m 5kW: W 09.30–11.00(Sat 13.00), Sun 05.00–13.00.
N. in English: D 16.00, 18.00.

Nairobi Reg. Station: 03.30–05.00, 09.15–10.30, 13.15–18.15.
1268kc 236.6m 5kW: As above.
4950kc 60.66m 5kW: 03.30–05.00, 13.15–18.15.

Mombasa Station: 791kc 379.3m 20kW: W 03.00–05.00, 10.00–11.00, 14.00–20.15; Sat 03.30–20.15; Sun 04.00–20.15.

Kisumu Station: W 03.00–05.00, 10.00–11.00.
953kc 314.6m 5kW: As above.
4804kc 62.44m 5kW: 03.00–05.00.
7290kc 41.15m 5kW: 10.00–11.00.

ANN: All tr's are regularly identified by the words "Voice of Kenya" preceded by the appropriated nat. or reg. service identity – **INT-SIG:** Drums – **V.** by letter. Re. to Chief Eng. Recordings accepted.
F.PL: In Jan 1967 a number of alterations are to be implemented involving the introduction of one 100kW sw-tr. Details not yet available – **FI:** By licence payments, adv. & Gov. subvention – **ALF:** £ 1/0/0.

LESOTHO (Kingdom)

L.T: GMT+2 h – Pr.: Sesotho, English.

RADIO LESOTHO (Gov.)
ADDR: P.O. Box 353, Maseru – L.P: Dir. of Inf: U. B. Tristram. STATION: 3824kc 78.46m 0.1kW – HOME SCE: D 04.45–05.15, 17.30–18.00 – ANN: "This is R. Lesotho" – V. by QSL-card.

RADIO STATION ZNF-4V (Educ.)
Owned and operated by the Educational Secretary, Roman Catholic Schools, Lesotho – ADDR: Catholic School Secretariat, P.O. Box 80, Maseru. Te: 2525 – L.P: Dir. Gen: M. Gareau O.M.I. St. Mgr: L. Nchapha. Dir. Tec: J. Mothale.
STATION: 3824kc 78.46m 0.1kW.
HOME SCE: A=Prgr's of the Catholic School Secretariat (rlg, educ, recreational; B=Prgr's of R. Lesotho.
D 04.30–05.30 in English & Sesotho (B). Sat 06.30–07.30 in Sesotho (A), D 16.30–17.30 in English & Sesotho (B), Sat 17.30–19.00 in Sesotho (A). Sun 06.30–07.00 in French (A) – ANN: "ZNF-4V, Maseru" – INT-SIG: Local basuto instruments – V. by letter.

LIBERIA (Rep. of)

L.T: GMT–¾ h – Pr.L: English, Liberian-Vernaculars.

STATION ELBC LIBERIAN BROADCASTING CORPORATION (Gov, Comm.)
ADDR: P.O. Box 594, Monrovia. Te: 22011. Cable: Broadcasts L.P: Gen. Mgr: D. Stuart-Williams. Chief Eng: W. Macdonald.
STATIONS (G.C: 10.42W/06.14N): 10kW.
650kc 461.5m – 3255kc 92.15m – 6090kc 49.26m
HOME SCE: 06.15(Sun 07.15)–10.45 on 650/3255kc, 12.45(Sun 10.45) 19.45 on 650/6090kc, 19.45–00.45 on 650/3255kc. N. in English: 06.30*, 08.00, 09.15, 10.40, 13.00, 14.45, 16.00, 18.00, 20.10*, 21.45, 23.45 –* African N – N. in African dialects: 07.10, 16.10, 18.10 – N. in French: 22.00 – ANN: "This is the Liberian Broadc. Corp, Monrovia" V. by QSL-card – FI: by adv.

RADIO STATION ELWA (Non-Comm, Cultural Missionary Broadc. Sce. of the Sudan Interior Mission)
ADDR: Box 192, Monrovia. Cable: Evangel – L.P: Gen. Mgr: Rev. D. Reed, Dep. Gen. Mgr: Rev. R. de la Haye. St. Mgr: Rev. W. H. Thompson. Dir. Prgr: R. Cornelius. Dir. Tec: R. Coddington. Dir. French Dept: M. Weber.
STATIONS (G.C: 10.42W/06.14N):

kc	m	kW	kc	m	kW	kc	m	kW
710	422.0	1	11950	25.10	10/50	17760	16.89	1
3225	93.05	10	11975	25.05	10/50	21535	13.93	1
4770	62.89	10	15155	19.80	50			

HOME SCE. (for Liberia/We. Africa):
English: W 06.12–08.45, 09.15–09.35, 12.42–18.15, 20.15–22.50 on 710/4770kc; 18.15–22.50 on 710kc. Sun 08.15–17.45, 20.15–22.45 on 710/4770kc; 17.45–20.15 on 710kc; 11.15–13.15 on 3225kc. N: 06.00*, 07.00*, 09.00*, 13.00*, 16.00*, 17.00, 18.00*, 20.00*, 20.45, 21.45. French: 19.00–20.15 on 4770kc.
Liberian Languages: W 06.12–09.00, 18.12–22.30 on 3225kc; 08.45–09.15 on 710/4770kc; Sun 06.12–11.15, 18.12–22.15 on 3225kc.
FOREIGN SCE:
To Ce. Africa: 05.00–08.15(W) on 11950kc; Sun 05.00–18.45 on 11975kc; 11.00–18.00 on 11975/17760/21535kc. English: 06.00–07.45 (Sun 08.00), 11.00–12.00(W) (also on 15155kc), 16.30–18.00(Sun 16.15–18.45). N: 06.00*, 07.00*, 11.00*, 17.00 – French: 05.00–06.00, 08.00–10.00(Sun only), 12.00–13.45(also on 15155kc) – Nigerian Languages: 07.45–08.15 (W only), 13.45–16.30 (also on 15155kc to 15.45) – Twi: 08.00–08.15(Mon–Fri) – Moré: 08.00–08.15(Sat) on 11950kc, 18.30–18.45(Thurs) on 4770kc.
To Congo on 15155kc: English: Tues–Sat 15.45–16.15, Sun 13.45–15.45 – French: 17.15–18.15 – Congo Languages: 16.15(Sun 15.45, Mon 16.00)–17.15.
To Middle East on 15155kc: English: 19.00–19.30 (Tues, Wed, Fri 19.15) – Greek: Tues, Wed, Fri 19.15–19.30 – Arabic: 18.15–19.00.
To No. Africa on 15155kc: English: 21.15–21.45 – French: 19.35–20.15 (Sun 20.30) – Spanish: 20.15–20.30 (Mon, Tues, Wed) – Italian: 20.15–20.30 (Thurs, Fri, Sat) – Arabic: 20.30–21.15. To So. America on 15155kc: Portuguese: 22.00–23.00 – *=BBC.
ANN: Home- & Foreign Sce: "This is ELWA R. Village broadc. from Monrovia, Liberia". French: "Ici ELWA R. Village, Monrovia, Liberia" – INT-SIG: Sign on music for all freq's: Orchestral version of hymn "What a Friend We Have in Jesus" – V. by QSL-card. Rp. appreciated. Re. in E. or F. Recordings accepted – PUB: R. News Bulletin quarterly – FI: Entirely by voluntary gifts of Christian people.

BBC WEST AFRICAN RELAY STATION (run by the ELBC for the BBC):
Relays of the BBC World Sce, French, Hausa & English Sce's for West Africa.
STATION: Monrovia 9555kc 31.40m 10kW – D.Prgr's: 05.45–08.00, 11.00–14.15, 16.00–22.30.
BBC World Sce: 06.00–06.30, 07.00–07.30, 16.00–17.00, 17.45–18.30, 20.00–20.10, 21.15–22.30.
English: 06.30–07.00, 07.30–08.00, 11.00–12.00, 17.00–17.45, 20.10–21.00 – French: 12.00–13.30, 13.30–13.45 (English by Radio), 18.30–19.30 – Hausa: 05.45–06.00, 13.45–14.15, 19.30–20.00, 21.00–21.15

VOICE OF AMERICA RADIO STATION IN LIBERIA
ADDR: Voice of America, Washington D.C. 20547, USA.
Short Wave: Monrovia 50/250kW (G.C: 10.33W/06.26N).

kc	m	kc	m	kc	m	kc	m
3990	75.19	7175	41.84	11960	25.08	15445	19.43
6035	49.71	7195	41.70	15270	19.65	17775	16.88
6180	48.54	7280	41.21	15315	19.59	21590	13.90
6165	48.66	9600	31.25	15360	19.53	21670	13.84
7135	42.05	9660	31.06				

D.PRGR: English: 03.00–07.30, 14.00–23.45. French: 06.00–07.30 (Mon–Fri), 19.30–22.00. Swahili: 17.00–18.30. Arabic: 18.30–19.30 – ANN: "You are listening to the Voice of America from Monrovia" – INT-SIG: Variations of "Columbia, Gem of the Ocean" – V. by QSL-card.

LIBYA (Kingdom of)

L.T: GMT+2 h – Pr.L: Arabic

LIBYAN BROADCASTING AND TV SERVICE (Gov.)
ADDR: P O Box 333, Tripoli; P.O. Box 274, Benghazi. Te: 1090(Tripoli) 3000(Benghazi). Cable: Idaalibya – L.P: Under Secr. Ministry of Inf. and Guidance: A. Hamouda Seialah. Dir. Gen: M.R. Ben Shaban. Prgr. Consultant: O. Ali. Tech. Supervisor: M. Archi.

STATIONS	kc	m	kW	STATIONS	kc	m	kW
Benghazi	674	445.1	100	Benghazi	3305	90.77	7.5
Tripoli	1052	285.1	50	Tripoli	6140	48.86	1
Tripoli	1214	247.1	5	Tripoli	5965	50.29	100
Benghazi	1484	222.2	10	Tripoli	7165	41.87	100
Benghazi	1594	188.2	5	Tripoli	9565	31.36	100

G.C: Benghazi 20.04E/32.08N – Tripoli 12.13E/32.42N.
HOME SCE in Arabic: 04.45–07.00, 12.00–22.15 (Fri 04.45–22.15). N: 05.30, 06.55, 13.00, 15.30, 17.30, 18.15, 19.30, 21.00, 21.55. Relayed on shortwaves (100kW) from Dec. 24th 1966.
English: 13.00–14.00, 18.00–19.00 on 1214/1594kc.
ANN: "Hunna Al Idaa Allibia Min Tarablus" (from Tripoli) or "Hunna Al Idaa Allibia Min Benghazi" (from Benghazi) – INTSIG: Prg's open and close with National Anthem – V. by QSL-card or letter.

BRITISH FORCES BROADC. SCE. BENGHAZI
is operated by the Ministry of Defence to provide a service of inf, entertainment as well as a link with home for H. M. Forces stationed in Benghazi. It is non-comm does not accept adv – ADDR: B.F.P.O. 55, Benghazi – L.P: St. Contr: P. Holwill. Sen. Eng: P. F. Blanchette. Prgr. Org: E. A. King.
STATIONS: 833kc 360.5m 1kW – 97.8Mc 4kW (ERP).
D.PRGRS: W 04.00–06.30, 15.30–21.00 (Sat 10.30–21.00), Sun 06.30–21.00. N (BBC): 05.00(W), 06.00(W), 07.00(Sun), 11.00(Sat/Sun) 16.00, 18.00 – ANN: "This is the British Forces Broadc. Sce. Benghazi" – V. by QSL-card.

BRITISH FORCES BROADC. SCE. TOBRUK
is operated by the Ministry of Defence to provide a sce. of inf, entertainment as well as a link with home for H.M. Forces stationed in Tobruk and El Adem. It is non-comm, does not accept adv – ADDR: B.F.P.O. 56, Tobruk – L.P: Contr: R. L. Angove M.B.E. Sen. Eng: L. Allen. Prgr Org: P. A. Doody.
STATIONS: 1484kc 202.2m 1kW – 1439kc 208m 1kW.
FM: 89Mc *90.2Mc 0.075kW. *=El Adem.
D. PRGRS: W 04.00–08.00, 14.00–21.00. Sun 06.15–10.15, 14.00–21.00. N (BBC): 04.00, 05.00, 06.00, 16.00, 18.00, 20.00 – ANN: "This is the British Forces Broadc. Sce. Tobruk" – V. by QSL-card. Recordings accepted.

MADEIRA (Portuguese)

L.T: GMT–1h (Su. GMT) – Pr.L: Portuguese.

ESTAÇÃO DA MADEIRA (CSB90) (Pr.)
ADDR: Picodos Barcelos, Funchal. Te: 21883.
STATION: (System Gates): CSB90 1484kc 202m 1kW.
HOME SCE: W 08.00–10.00, 12.00–17.30, 19.30–23.30. Sun 08.00–23.30 – ANN: "Estação. R. da Madeira (CSB90) no comprimento d'onda de 202 metros freq. de 1484kc..." – F.PL: 1kW.

POSTO EMISSOR DE RADIODIF. DO FUNCHAL (Pr.)
ADDR: Rua Ponte de S. Lazaro 3, Funchal. Te: 1797.
STATION: CSB91 1529kc 196.2m 0.3kW – HOME SCE: W 12.30 (Tues, Fri 12.00)–17.00, 19.30–24.00. Sun 10.00–24.00 – V. by letter.

MALAGASY REPUBLIC

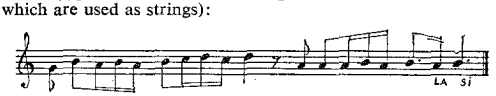
L.T: GMT+3 h – Pr.L: Malgache, French.
RADIODIFFUSION NATIONALE MALGACHE (Gov.)
ADDR: B.P. 442, Tananarive. Cable: R. Madagascar. Te: 223-81.
L.P: Dir: R. Rabesahala. Techn. Counsellor: R. Leruste. Dir. Tec: B. Rakotoarivelo. Dir. of Nat. & Intern. Netw: J. Rafidinarivo. Dir. Publicity: D. Razanamaholy.

STATIONS (G.C: 47.35E/18.50S):

kc	m	kW	Net.	kc	m	kW	Net.	kc	m	kW	Net.
1394	215.12	4	I	3288	91.24	30	II	7105	42.22	30	II
1502	199.7	4	II	4985	60.18	4	I	7155	41.92	30	I
3232	98.82	30	I	5010	59.88	4	II	15270	19.54	100	

HOME SCE. Nat. Net. I (Malgache): W 03.00–05.00, 08.00–11.00, 15.00–19.00. Sat 03.00–20.00. Sun 03.30–19.00. 1394/4985kc: as above; 3232kc: 03.00–05.00 (Sat/Sun 03.00–06.00), 15.00(Sat/Sun 13.58)–19.00(Sat 20.00); 7155kc: 08.00–11.00 (Sat/Sun 06.00–13.58). N: Mon–Fri 03.05, 04.00, 08.15, 09.30, 10.30, 16.15, 18.30. Sat 03.05, 04.00, 06.00, 07.00, 08.15, 09.30, 10.30, 16.15, 18.30. Sun 05.15, 09.30, 18.30.
Nat. Net. II (French): W 03.30–05.15, 09.00–11.00, 15.00–19.30. Sat 03.30–21.00. Sun 04.00–19.30. 1502/5010kc: as above. 3288kc: 03.30–05.15(Sat/Sun 06.00), 15.00(Sat/Sun 13.58)–19.30(Sat 21.00); 7280kc: 08.00–11.00(Sat/Sun 06.00–13.58).
N: W 03.45, 04.45, 09.15, 09.45, 10.30, 15.30, 16.30, 19.15. Sun 05.15, 09.15, 09.45, 16.30, 19.15.

FOREIGN SERVICE: Testing 16.00–17.00 (irr.) on 15270kc (or 15265) towards West Africa & Europe in French & English.
ANN: Malgache: "Antananarive ity! Fampielezam-Peom-Pirenena Malagasy, Antoko voalohany". F: "Ici Tananarive – Radiodiff. Nationale Malgache" – INT-SIG: "O... Raketaka" played on "Valiha" (typical instrument consisting of bamboo the detached fibres of which are used as strings):



V. by QSL-card. Recordings accepted.
PUB: Prgr.schedule (quarterly).

RADIO UNIVERSITE (Gov. Educ.)
ADDR: B.P. 909, Tananarive. Te: 22218 – L.P: Dir. Gen: R. Roblot. St. Dir: M. Croce. Dir. Tec: B. Razakaboay.
STATIONS: 1275kc 235.3m 1kW – 3370kc 88.02m 4kW. 6070kc 49.42m 4kW – 7880kc 38.07m 4kW.
HOME SCE: W 03.15–04.30, 15.30–19.00 on 1275/3370kc; Sun 12.00–14.00 on 1275/6070/7880kc, 14.00–19.00 on 1275/3370kc.
ANN: "Ici Tananarive R. Diff. Nationale Malgache, R. Université". V. by letter – PUB: Prgr. schedule free.

MALAWI

L.T: GMT+2 h – Pr.L: English, Chinyanja, Chitumbuka.
MALAWI BROADCASTING CORPORATION
(Independent statutory body).
ADDR: P.O. Box 453, Blantyre. Cable: Radiomalawi. Te: 8461.
L.P: Chmn: S. B. Somanje. Secr. & Head of Adm: R. Knowles. Chief Eng: G. K. Macdonald, M.I.E.E.E. Head of Prgrs: T. L. Neale. Head of N: C. A. H. Kachingwe.

STATIONS (G.C: Limbe 35.02E/15.42S):

Lilongwe	602kc	498.4m	1kW	– Limbe	3380kc	88.76m 10kW
Karongo	692kc	434.0m	1kW	– Limbe	5995kc	50.04m 10kW
Limbe	764kc	392.6m	10kW			

HOME SCE: On all mw's: 03.45–06.00, 07.00–20.00(Sat 22.00); On 3380kc 03.45–06.00, 15.30–20.00(Sat 22.00); On 5995kc 07.00–15.15 – N. in English: 05.00(W), 06.00(Sun), 08.00, 11.00, 16.00, 18.00, 19.50, 20.00(Sat), 21.50(Sat). Chinyanja: 04.15, 08.15, 16.30. Chitumbuka: 04.30, 08.30, 16.45.
ANN: E: "You are tuned to the Malawi Broadc. Corpo. calling from Blantyre. We are broadc. on... in the sw band and on mw 393m for listeners in the Ce. Region" – INT-SIG: African drums and crowing cock – V. by QSL-card – F.PL: 1kW st's at Nsanje, Nkhota-Kota, Mzimba. FM sce. for Blantyre/Limbe area – FI: By Gov.subvention, license fees and adv.

MALI (Republic of)

L.T: GMT – Pr.L: French, English, Vernaculars.
RADIO MALI (Gov.)
ADDR: B.P. 171, Bamako. Cable: Radio Mali. Te: 2474 – L.P: Dir: M. Racine Kane. Dir. Tec: M. Keita.
STATIONS: (G.C: 0758W/12.38N).

1268 kc	236.6 m	4 kW		7285 kc	41.18 m	18 kW
1430 –	210.0 –	60 –		9745 –	30.78 –	50 –
4783 –	62.72 –	18 –		*11750 –	25.53 –	50 –
4835 –	62.05 –	18 –		**11815 –	25.39 –	50 –
7145 –	41.99 –	18 –				

* from Nov. 1st; ** until Oct. 31st.

HOME SCE. in French, English, Bambara, Sonraie, Peul, Sarakolé, Ouloff, Tamachek, Maure: W: 06.00–08.00 on 1268/1430/4783/4835/9745kc, 12.00–14.00(Sat 17.30) on 1268/1430/7145/7285/9745kc, 18.00(Sat 18.30)–23.00 on 1268/1430/4783/4835/9745kc. Sun: 08.00–17.30 on 1268/1430/7145/7285/9745kc, 18.30–23.00 on 1268/1430/4783/4835/9745kc – N: French: 07.00(W), 09.00(Sun), 12.45, 20.15, 22.30. English: 12,25, 19.55. Vernaculars: D 12.30, 13.15, W 18.45, 19.00, 19.15, 19.25, 19.35. – LL (elementary French):W 19.45.
Special Prgr. on 11750kc: Mon 10.30–11.15.
ANN: F: "Ici Bamako, Radiodiff. Nationale de la République du Mali émettant sur..." – INT-SIG: African Music on local instrument "Cora" – V. by QSL-card. Records accepted. Rp. – F.PL: 100kW fr.

MAURITANIA (Republic)

L.T: GMT – Pr.L: French, Arabic, Vernaculars.
RADIO MAURITANIA (Gov.)
ADDR: B.P. 200, Nouakchott. Te: 2164 – L.P: Dir: M. B. Fall. Chief Eng: G. Preu d'Homme. High Commissioner Inf. & Tourism: A. O. Sidya.
STATIONS (G.C: 15.57W/18.07N):

kc	m	kW	kc	m	kW	kc	m	kW
1349	222.4	1	4849	61.87	30	7245	41.41	4
3222	93.11	30	6035	49.71	4	9610	31.22	30

HOME SCE: W 07.00–08.00 on 1349/3222kc, 12.00–14.00 on 1349/6035/9610kc, 18.00–22.30(Sat 23.00) on 1349/3222kc. Sun 08.00–14.00 on 1349/6035/9610kc, 17.00–23.00 on 1349/3222kc – N. in French: 07.15(W), 10.30(Sun), 12.45, 20.00, 22.25 – Arabic: 07.20(W), 08.55 (Sun), 13.00, 20.30, 22.15. Ouoloff: 12.00, 18.00. Toucouleur: 12.30, 18.30. Sarakolé: 12.15, 19.00.
NB: 3222kc may be replaced by 4849kc, and 6035 kc by 7245 kc.
ANN: "Ici Nouakchott, Radiodiff. de la République Islamique de Mauritanie" – INT-SIG: Mauritanian guitar – V. by QSL-card. Re. in F, Arabic – F.PL: 100kW sw-tr's at Nouakchott in 1968, and 100kW mw-tr within 3 years; three 10kW mw-tr's for relay of Nouakchott – AD: D 2×30 seconds, at 07.00, 20.00.

MAURITIUS (British)

L.T: GMT+4 h – Pr.L: English, French, Hindustani, Chinese.
MAURITIUS BROADCASTING CORPORATION (Comm.)
ADDR: Malherbes Transmitter Bldg, Forest Side. Te: Curepipe 507. Cable: Broadcast – L.P: Dir. Gen: St. McCormack. Chief Eng: G. Gaughan. Head of News Dept: J. Delaitre.
STATIONS (10kW): 683kc 439m – 4850kc 61.86m – 9710kc 30.90m. (G.C: 57.31E/20.19S).
HOME AND DEPENDENCIES: D 02.30–18.30.
683kc: as above, 4850kc: 13.00–18.30, 9710kc: 02.30–13.00.
English/French: W 03.00–10.30, 14.30–18.30(Sat 19.00). Sun 03.00–09.00, 14.30–18.30. N: French: 03.30, 06.00, 08.30, 15.00, 16.00, 17.30. English: 04.00, 18.00 – Wrp: 03.40, 15.10(F), 04.10(E) – Indian Languages: W 02.30–03.00, 10.30–14.30. Sun 10.00–14.30 – N: 02.45, 14.00 – Chinese: Sun 09.00–10.30. Tues–Thurs 09.30–10.30.
ANN: E: "This is Mauritius Broadc. Corpo". F: "Ici la M.B.S. poste de radiodiff. de l'Ile Maurice" – INT-SIG: Opening tune: "Brucker lagger march". Before N: "Cortege de Bacchus" from Sylvia Ballet by Delibes – V. by letter. Recordings accepted.

MOROCCO (Kingdom of)

L.T: GMT – Pr.L: Arabic, French, Spanish, English, Berber.
RADIODIFFUSION TELEVISION MAROCAINE (Gov.)
ADDR: 1 Rue Pierre Parent, Rabat. Cable: Radiomaroc. Te: 201.51.
HOME SCE: First Netw. (Chaine A):
Arabic: W exc. Fri 06.30–09.00, 12.00–24.00. Fri Sun 06.30–02.00.

	kc	m	kW		kc	m	kW
Oujda	593	506	100	Marrakech I	971	309	1
Sebaa Aioun I	611	491	140	Safi I	1025	293	1
Casablanca	818	367	1	Tetuan I	1052	293	20
Rabat I	827	363	1	Tanger II	1115	269	1
Agadir	935	321	100	Tanger	1232	244	50
				B. Mellal	1343	223	0.25

Short Waves: *Sebaa Aioun, **Tangier.
On 7225kc 41.52m 10kW: as above – **On 9615kc** 31.20m 100kW: 19.00–22.00 to Mid East. **On **11735kc** 25.56m 50kW: 06.30–09.00, 12.00–18.30. **On 15345kc** 19.55m 50kW: 06.30–09.00, 12.00–18.00 (Fri & Sun 06.30–18.00) to We. Africa/Mauritania.

Second Netw. (Chaine B):
French, Spanish: W 07.00–09.00, 12.00–15.00, 18.00–24.00, Sun 07.30–02.00.

	kc	m	kW		kc	m	kW
Sebaa-Aioun II	701	428	140	Marrakech	1151	261	1
Oujda	837	363	100	Casablanca II	1187	253	1
Tanger III	1016	295	1	Safi II	1322	227	1
Rabat II	1025	293	1				

Short Wave: Sebaa-Aioun 7115kc 42.16m 10kW to So. Morocco.
French: W 07.00–08.30, 12.00–14.00, 18.00–23.00. Sun 07.30–10.00, 11.00–14.00, 15.00–23.00 – **N:** 07.45, 13.00, 20.00, 22.45. **Spanish:** 08.30–09.00 (Sun 10.00–11.00), 14.00–15.00, 23.00–24.00 – **N:** 08.30, 14.15, 23.00.

Third Netw. (Chaine C):
Berber: 07.00–09.00, 12.00–15.00, 17.00–23.00.

	kc	m	kW		kc	m	kW
Tetuan II	917	327	5	Casablanca III	1484	202	1
Sebaa-Aioun III	1043	288	25	Marrakech	1594	188	1
Rabat III	1295	232	1				

"Voice of Morocco": 1232kc 243.5m 50kW: 09.30–18.00, 22.00–24.00.
Arabic: 09.30–14.00, 22.00–24.00 – **Spanish:** 14.00–16.00 – **French:** 16.00–18.00.

FOREIGN SERVICE: French, English, Ouolof: 18.30–23.30.

Sebaa-Aioun	6160kc 48.70m 50kW:	to We Af/Mauritania
Tangier	11735kc 25.56m 50kW:	to We Af/Mauritania
Tangier	15380kc 19.51m 50kW:	to We Af/Mauritania
Tangier	15410kc 19.47m 10kW:	to So Morocco

G.C: Sebaa-Aioun 05.23W/33.55N; Tangier 1 (15410kc) 05.40W/35.45N; Tangier 2 (9615/11735/15380kc) 05.58W/35.36N.

ANN: F: "Ici Rabat Radiodiff. Télévision Marocaine". E: "This is the Morroccan Broadc. and Television System Rabat". Sp: "Aqui Radiodiff. Televisión Maroqui" – Voice of Morocco: F: "Ici Tanger la voix du Maroc" – V. by QSL-card. Recordings accepted. Rp. – **PUB:** Monthly magazine in Arabic – **F.PL:** 400kW LW-tr – **ALF:** DH 15,–.

VOICE OF AMERICA RADIO STATION IN TANGIER

ADDR: Voice of America, Washington D.C., 20547, USA.
STATIONS: Tangier 35/50/100kW: 02.45–08.00, 12.00–24.00.

kc	m	kc	m	kc	m	kc	m
5965	50.29	9540	31.45	11740	25.55	15295	19.62
6125	48.98	9615	31.20	11790	25.45	15315	19.59
7170	41.84	9660	31.06	11805	25.41	15390	19.49
7235	41.47	9670	31.02	11960	25.08	17815	16.84
7250	41.38	11710	25.62	15150	19.80	17855	16.80
7270	41.27	11735	25.56	15290	19.62	21455	13.98

G.C: 05.56W/35.41N. 21690 13.83
D.PRGR: See USA – **ANN:** "You are listening to the Voice of America from Tangier" – **INT-SIG:** Variations of "Columbia, the Gem of the Ocean" – **V.** by QSL-card.

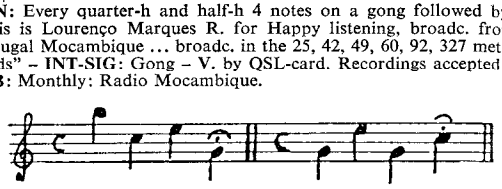
MOZAMBIQUE (Port. East Africa)

L.T: GMT+2 h – **Pr.L:** Portuguese, English, Afrikaans, Vernaculars.
RADIO CLUBE DE MOÇAMBIQUE (Non-profit organization)
ADDR: P.O. Box 594, Lourenço Marques. **Te:** 4045. **Cable:** Radioclube – **L.P:** Pres: A. das Neves Conçalves. Executive Dir: H. A. da Silva Rodrigues. Gen. Mgr: V. Rodrigues. Chief Portuguese Section: J. Mendonça. Chief English Section: D. Davies.
STATIONS: 15 tr's from 5 to 100kW (G.C: 32.22E/25.59S):

kc	m	Prgr.	kc	m	Prgr.	kc	m	Prgr.	kc	m	Prgr.
737	407.1	A	3220	93.17	B	4859	61.74	**	6180	48.54	Rlg.
917	327.0	B	3265	91.87	A	4865	61.66	*	11780	25.47	B
1160	258.6	C	3340	89.82	**	4925	60.91	A	11820	25.38	A
1223	245.3	*	4760	63.03	**	6050	49.59	B	15290	19.62	C
1358	220.9	B	4855	61.79	B	6115	49.06	A			

FM: 98Mc(Prgr. A+C). *=Ronga, Shangane; **=Ronga, Shangane +Rlg. prgr.

A PRGR. in Portuguese: 04.30–06.00, on 737/4925/6115kc, 06.00–16.30 on 737/4925/6115/11820kc, 16.30–17.00 on 737/4925/11820kc, 17.00–18.00 on 737/3265/4925/11820kc, 18.00–21.00 on 737/3265/4925kc.
N: 05.15, 10.30, 16.30, 17.30, 20.30 – **Rlg:** Sun 07.00, 18.00 – **Wrp:** 10.30, 16.30 – **L.L (English):** Tues 11.20, Fri 16.00.
ANN: On the h: 4 notes on gong followed by "Aqui Portugal Mocambique fala-vos o R. Clube em Lourenço Marques transmitindo en ondas curtas e medias" – **INT-SIG:** Gong – **V.** by QSL-card.
B PRGR. in English, Afrikaans: 23.00–04.00 on 917/3220kc, 04.00–04.30 on 917/3220/4855kc, 04.30–05.00 on 917/4855/11780kc, 05.00–15.00 on 4855/6050/11780kc, 15.00–16.00 on 917/1358/4855/6050/11780kc, 16.00–16.30 on 917/1358/4855/11780kc, 16.30–17.00 on 917/1358/3220/4855/11780kc, 17.00–23.00 on 917/1358/3220/4855kc.
Rlgs. Prgr's: D 19.30–21.00 on 3340/4760kc, Sun also 04.30–05.00 on 4859/6180kc.
ANN: Every quarter-h and half-h 4 notes on a gong followed by: "This is Lourenço Marques R. for Happy listening, broadc. from Portugal Mocambique ... broadc. in the 25, 42, 49, 60, 92, 327 metre bands" – **INT-SIG:** Gong – V. by QSL-card. Recordings accepted – **PUB:** Monthly: Radio Mocambique.



"C" PRGR. in Portuguese (to Lourenco Marques & Europe): 16.30(Sun 14.00)–20.00 on 1160/15290kc+FM 98.01Mc.
AFRICAN SERVICE: Changane: W 16.00–18.00 on 1223/3340/4865 kc, Sat also 10.00–13.00 on 1223/4865kc. Sun 05.00–08.00 & 11.00–13.00 on 1223/4865kc, 15.00–17.30 on 1223/3340/4865kc – **Ronga:** W 18.00–20.00 on 1223/4865kc, Sat also 13.00–16.00 on 1223/4865kc, Sun 08.00–11.00, 13.00–15.00, 17.30–20.00 on 1223/4865kc.
FI: By state, license, adv – **AD:** Portuguese: 04.30–21.00. English: 24 h.

REGIONAL STATIONS (all 0.25kW soon to be 5kW):
G.C: Porto Amelia 40.45E/13.02S; Quelimane 36.53E/17.52S; Nampula 39.13E/15.07S.

Name	kc	m	Name	kc	m
Quelimane	935	320.9	Porto Amelia	3375	88.89
Nampula	1232	243.5	Quelimane	4895	61.29
Nampula	1358	220.9	Nampula	4955	60.54
Porto Amelia	1421	211.1	Porto Amelia	7115	42.16
Nampula	3355	89.42	Quelimane	7160	41.90
Nampula	3365	89.15	Nampula	7195	41.70

PORTO AMELIA (Emissor Reg. de Cabo Delgado) on 1421/3375/7115kc: **Portuguese:** 05.30–07.00(Sun), 10.00–12.00(D), 16.00–19.00 (exc. Wed, Sun), 17.30–19.00(Sun) – **Macua do Medo** (African Sce): Wed 17.30–19.00, Sun 09.30–10.30, 16.00–17.30.
NAMPULA (Emissor Reg. do Norte): **Portuguese:** W 04.30–06.00 on 1232/3365kc, 09.30–12.00 on 1232/3365/7195kc, 16.30–17.00 & 18.00–20.00 on 1232/3365/4955kc. Sun 06.00–08.30 on 1232/7195kc, 08.30–12.00 on 1232/3365/7195kc – **Macua** (African Sce) on 1358/3355/4955kc: D 17.00–18.00, Sun also 06.00–08.30.
QUELIMANE (Emissor Reg. da Zambézia): **Portuguese:** Sun 08.00–12.00 on 935/7160kc, 16.00–20.00 on 935/4895kc. W 10.15–12.00 on 935/7160kc, 16.00–19.30 on 935/4895kc – **Chuabo** (African Sce): 17.00–18.00 (Sun, Wed, Sat 19.00) on 3180kc, Sun also 05.00–06.00 on 935/4895kc. 10.00–11.00 on 4895kc.

EMISSORA DO AERO CLUBE DA BEIRA (Priv. Comm.)

ADDR: C.P. 3, Beira. **Te:** 2505. **Cable:** Aero. **L.P:** Dir: F. J. Silvério Moiteira.
STATIONS: mw 5kW, sw 0.3kW (G.C: 34.52E/18.49S):
1430kc 210m – 7240kc 92.59m – 7240kc 41.44m
HOME SCE. in Portuguese: W 04.30–06.00, 09.30–11.30(Sat 15.00, Sun 05.00–15.00) on 1430/7240kc, 15.30(Sat/Sun 15.00)–16.00 on 1430/3240/7240kc, 16.00–17.00 on 1430/7240kc, 17.00–21.00 on 1430/3240kc. N: 04.50(W), 10.00, 17.45, 20.15 – **"Hora Africano":** D 16.00–17.00 (Sun also 06.00–07.00) on 3240kc.

RADIO PAX (Rel. owned by Franciscan Fathers)

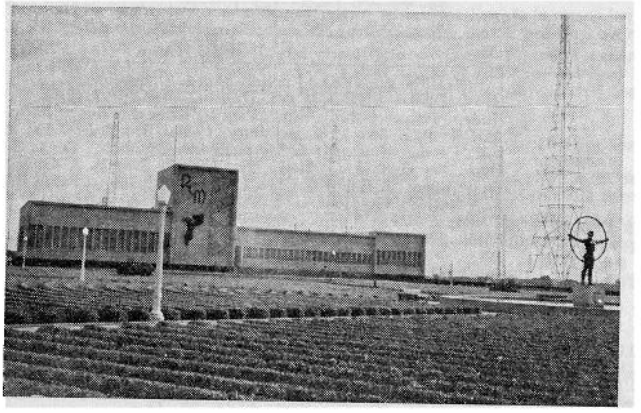
ADDR: C.P. 594, Beira. **Te:** 2763. **Cable:** Radio Pax.
L.P: St. Mgr: Dr. M. Reis Miranda. Dir. of Prgr's: C. das Neves. Dir. Tec: A. Especial.
STATIONS (G.C: 34.52E/18.49S):
1295kc 231.7m 1kW – 5025kc 59.70m 0.5kW
3960kc 75.76m 0.5/5kW – 7205kc 41.64m 10kW
HOME SCE. in Portuguese, Xissena, Maxangane:
W 03.55–05.30, 09.30–11.30(Sat 12.30), 16.30–21.00. Sun 04.55–12.00, 15.00–21.00 – **N. in Portuguese:** 04.30(Sun 05.30), 10.15, 17.30, 20.30. **Vernaculars (Xissena, Maxangane):** W 14.55–16.30, Sat 12.30–16.30, Sun 12.00–15.00 – **N:** W 15.45, Sun 12.15.
ANN: "Aqui Beira, Moçambique, provincia de Portugal em Africa transmite a R. Pax, Emissora Católica" – **V.** by QSL-card or letter.
INT-SIG: Chimes. Prgr's open with religious choir – **F.PL:** 3kW mw.
FI: By gifts and state.

NIGER (Republic)

L.T: GMT+1 h – **Pr.L:** French, Vernaculars.
RADIO NIGER (Gov.)
ADDR: B.P. 361, Niamey. **Cable:** Radioniger. **Te:** 2272 – **L.P:** Dir: B. Lucas. Dir. Tec: M. Andrieux. Asst. Dir: G. Sidikou.

AQUI PORTUGAL MOÇAMBIQUE

Rádio Clube de Moçambique



com os seus emissores em

– *Lourenço Marques*

– *Quelimane*

– *Nampula e*

– *Porto Amélia*

As emissões mais populares do Continente Africano.

Programas diários em Português, Inglês, Afrikaans e Dialectos Africanos.

Informações detalhadas a páginas 118

STATIONS: (G.C: 02.06E/12.30N):

kc	m	kW	Net	kc	m	kW	Net	kc	m	kW	Net
1511	198.4	1	I	3260	92.02	4	I	7155	41.92	4	I/III
1595	188.0	0.1	IV	5020	59.76	4	II	9735	30.81	30	II

HOME SCE: Net I: W 05.30–06.30 on 1511/3260kc, 11.30–13.17 on 1511/7155kc, 17.00(Sat 15.00)–21.15(Sat 22.30) on 1511/3260kc. Sun 07.00–16.30 on 1511/7155kc, 16.30–21.15 on 1511/3260kc. **Net II:** W 05.30–06.30 on 5020kc, 11.30–13.17 on 9735kc, 17.00(Sat 15.00)–21.15(Sat 22.30) on 5020kc. Sun 07.00–16.30 on 9735kc, 16.30–21.15 on 5020kc.
N: French: 06.00(W), 09.10(Sun), 12.00, 17.00(W), 18.45, 21.10. **English:** Wed, Sat 17.15 – **L.L.** (English): Mon, Tues, Thurs, Fri 17.15. **Net III:** W 06.30–11.30 on 7155kc. **N in French:** 07.30, 09.00, 10.30. **Net IV:** W 17.00–21.15(Sat 22.30) on 1595kc, Sun 07.00–21.15 on 1595kc. **N in French:** 09.10(Sun), 12.00(Sun), 17.00(W), 18.45, 21.10.
Vernaculars: Net I: 12.20, 18.00 (Djerma), 17.45 (Peulh), 20.30 (Tamachek). Net II: 12.20, 18.00 (Hausa), 17.30 (Beriberi). Net III: 09.05, 10.35 (Djerma), 09.10, 10.40 (Hausa).
ANN: At opening and close down "La Nigerienne". Local flute and "Ici Niamey Radiodiffusion de la République du Niger".
INT-SIG: Local Flute.

V. by QSL-card. Recordings accepted – **F.PL:** Mw relay st's at Tahoua, Gaya, Tillabery, Goure, Mainé, Soroa – **PUB:** Prgr. schedule (weekly).

NIGERIA (Republic of)

L.T: GMT+1 h – **Pr.L:** English, Yoruba, Hausa, Ibo.

THE NIGERIAN BROADCASTING CORPORATION
(Statutory Corporation)
ADDR: Broadcasting House, Lagos. **Te:** 26411. **Cable:** Broadcast. **L.P:** Dir. Gen: E. V. Badejo. Dir. Tec: D. M. T. Oke. Dir. External Sce: Chinua Achebe. Dir. Prgr: Y. Olumide. Dir. Adm: H. N. Osakwe. Secr: O. Fashina.

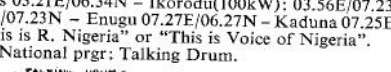
NATIONAL PRGR. (from Lagos):
1088kc 276m 10kW: 04.30–22.00(Sat 23.00, Sun 05.00–22.00).
4990kc 60.12m 20kW: 04.30–09.00, 14.00–22.30(Sat 23.00, Sun 05.00–09.00, 14.00–22.00).
7255kc 41.35m 10kW: 08.00–16.03 (Sun 08.00–22.00).
N: English: 05.30, 06.00*, 07.00, 09.00, 10.00, 11.00, 12.00*, 13.00, 14.00*, 15.00, 16.00, 17.00, 18.00**, 19.00, 20.00**, 21.00, 22.00 – *10 min. **15 min; other times 3 min's summary – **Educational Prgr's in English:** D 07.45, 09.30, 10.03, 11.03, 15.30 – **N. in Hausa, Ibo, Yoruba:** 08.00, 17.03, 21.03.

WEST REG. PRGR. (From Ibadan):
1358kc 221m 10kW: 04.30–22.30(Sat 23.00).
1397kc[1] 215m 0.25kW: as 1358kc. [1]=Ijebu-Ode, Warri.
3204kc 93.64m 10kW: W 04.30–22.30(Sat 23.00), Sun 05.00–07.08, 16.45–22.00.
7285kc 41.18m 10kW: D 07.15–16.30.
N. in English, Yoruba: 13.30–19.00.

EAST REG. PRGR (from Enugu):
1320kc 227 m 10kW: 04.30–22.30(Sat 23.00, Sun 05.00–22.00).
1397kc[2] 215m : as 1320kc. [2]=Onitsha, P. Harcourt.
1397kc[3] 214m 0.25kW: as 1320kc. [3]=Calabar
3980kc 75.38m 10kW: 04.30–07.03, 16.30–22.30(Sat 23.00).
6145kc 48.82m 2.5kW: 07.15–16.30.
N. in English, Ibo, Efik: 14.30, 19.00.

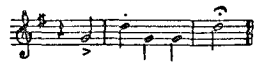
NORTH REG. PRGR. (from Kaduna):
1416 kc 212 m 1 kW: 04.30–22.30(Sat 23.00).
1376[4] – 218 – : 04.30–22.30(Sat 23.00).
1397[5] – 214 – : 04.30–22.30(Sat 23.00).
3326 – 90.20 – 7.5 – : 04.30–07.03, 16.30–22.30(Sat 23.00).
3396 – 88.36 – 10 – : 16.45–22.30.
6175 – 48.58 – 20 – : 07.00–16.30.
9655 – 31.07 – 10 – : 07.00–16.30.
[4]=Kano. [5]=Jos, Sokoto, Ilorin, Maiduguri, Zaria, Katsina.
N. in English, Hausa: 14.30, 19.00.

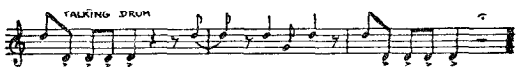
EXTERNAL SERVICES to No. Ea. C. and So. Africa, M. East (from Lagos): 13.00–22.00 on 7275/9690kc(10kW); 13.00–16.00, 17.00–22.00 on 11900kc(100kW), 16.00–22.00 on 15255kc(100kW). **English:** 15.00–16.00, 17.00–19.00, 21.00–22.00. **N:** 15.00, 17.00, 21.00 – **French:** 13.00–14.00, 19.00–21.00. **N:** 13.00, 19.00 – **Arabic:** 16.00–17.00. **N:** 16.00 – **Hausa:** 14.00–15.00. **N:** 14.00.
G.C: Lagos 03.21E/06.34N – Ikorodu(100kW): 03.56E/07.23N – Ibadan 03.54E/07.23N – Enugu 07.27E/06.27N – Kaduna 07.25E/10.31N.
ANN: "This is R. Nigeria" or "This is Voice of Nigeria".
INT-SIG: National prgr: Talking Drum.



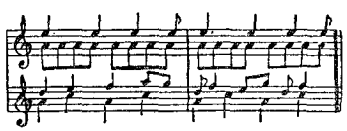
North Regional Programme: Trumpet-Type Instrument.

West Regional Programme: Talking Drum.





East Regional Programme: Snake Drum-Xylophone Bass.



V. by QSL-card. Re. will be welcomed by Chief Engineer – **PUB:** Monthly: Transmission schedules are distributed free of charge. The Nigerian Radio Times available on a subscription basis.
FI: By state & comm. revenue – **AD:** 11 times per day.

EASTERN NIGERIA BROADCASTING CORPORATION

ADDR: P.O. Box 350, Enugu. **Cable:** Easteller. **Te:** 2579 – **L.P:** Ag. Contr: M. A. Ohuonu. Chief Eng: D. S. Reid. Dir. Prgr: J. D. Ekwere. Comm. Mgr: R. G. Lotz.
STATIONS (G.C: 07.27E/05.27N) 10kW:
953kc 315m – 4855kc 61.79m.
HOME SCE: W 05.00–23.00. Sun 06.00–22.00.
N in English: 05.06, 05.30, 06.00*, 07.00, 08.00, 09.00, 10.00, 11.00*, 13.00*, 13.45, 14.55, 16.00, 17.00, 18.00*, 18.45, 20.00*, 21.00, 22.00. *=BBC – **Vernaculars:** Ibo, Efik, Ijaw: 06.45, 12.00, 18.10; Hausa, Yoruba: 06.15, 13.09, 18.21 – **ANN:** "This is Eastern Nigeria Broadc. Sce" or "This is the Voice of Eastern Nigeria" – **INT-SIG:** Drum (repeated) – **V.** by letter. Recordings accepted – **F.PL:** A 500kW tr. using 620kc may operate before the end of 1966.

RADIO TELEVISION KADUNA (Comm.)

ADDR: P.O. Box 250, Kaduna, No. Nigeria. **Cable:** Radionorth. **Te:** 2294 – Dep. Chief Executive: A. Zoru. Chief Eng: G. White.
STATIONS: (G.C: 07.33E/10.50N):
593kc 505.9m 10/250kW – 6090kc 49.26m 10kW.
HOME SCE. in English, Hausa: 05.00–22.00 on 593/6090kc – **N. English:** 05.30, 11.30, 14.00, 18.30. **Hausa:** 05.40, 11.40, 14.10, 18.40.
ANN: "This is R. Television Kaduna" – **INT-SIG:** Bauchi Drums. **V.** by letter. Recordings accepted – **FI:** By comm. but subsidised.

WESTERN NIGERIA RADIOVISION SERVICE (Comm.)

ADDR: P.O. Box 1460, Ibadan. **Cable:** Radvision. **Te:** 24381 – **L.P:** Ag. Man. Dir. & Dir. Tec: J. O. Oyeleye. Contr. of Prgr's: A. Ogunlade. Sales Mgr: S. Rhodes. Secr: A. Oyelowo. Publ. Rel. Officer: J. O. Olagbaju.
STATIONS (G.C: 03.57E/07.24N): *Abafon: Others Ibadan.
*602kc 498.4m 10kW – 656kc 457.3m 10kW
3380kc 88.70m 10kW – 6050kc 49.59m 10kW
HOME SCE: W 05.00–23.05, Sun 05.00–22.05.
On 3380kc: 05.00–07.15 (Sun 06.00–07.30) and from 16.40. On 6050kc: 07.15(Sun 07.30)–16.40 – **N. in English:** 05.10(W), 06.00, 07.00(BBC), 07.10(African), 12.00, 17.00, 20.00. Also short N every h at 09.00–23.00 – **N. in Yoruba, Edo Hausa:** 16.00 – **ANN:** "This is the Western Nigeria Broadc. Sce" or "This is WNBS, Ibadan" – **INT-SIG:** Chimes – *2 notes only (G & E)* – **V.** by QSL-card or letter. Re. to Chief. Eng. **F.Pl:** 50kW on 650kc – **FI:** 100% from We. Reg. Gov. of Nigeria. **AD:** D 6 min. each h.

REUNION (French)

L.T: GMT+4 h – **Pr.L:** French.

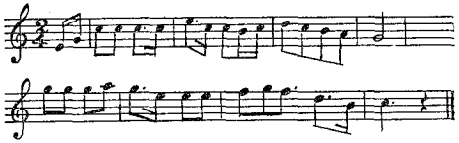
OFFICE DE RADIODIFF-TELEVISION FRANCAISE (ORTF)

ADDR: B.P. 309, St. Denis, La Réunion. **Te:** 8-68 – **L.P:** Chef des Sces: B. Guyot. Dir. Prgr: R. Villeneuve. Dir. Tec: Leguillier. Dir. N: J. V. Dalor.

STATIONS (G.C: 55.30E/20.55S):

602 kc	498.4 m	8 kW	all times
1124 kc	266.9 m	1 kW	all times
2246 kc	122.6 m	4 kW	02.30–05.00, 13.00–18.30
3210 kc	93.44 m	1.5 kW	all times
4807 kc	62.41 m	4 kW	all times
7245 kc	41.41 m	4 kW	05.00–13.00

HOME SCE. in French: W 02.30–10.00, 13.30–18.30. Sat 02.30–18.30, Sun 03.00–18.30 – **N:** W 02.30, 03.00, 03.30, 04.00, 08.30, 15.45, 18.00. Sun 04.00, 08.30, 15.45, 18.00 – **Wrp:** W 02.59, 03.59, 14.07, 15.35. Sun 03.59, 14.00, 15.35.
ANN: "Ici La Réunion, office de Radiodiff. Télévision Française". **V.** by letter. **Rp – INT-SIG:** "Madina" (Reunion Folklore) played on guitar.



RHODESIA

L.T: GMT+2 h – **Pr.L:** English, Shona, Sindebele.

RHODESIA BROADCASTING CORPORATION

(Indep. Statutory Body, established by Rhodesia Act of Parliament).
ADDR: P.O. Box 2696, Salisbury. **Cable:** Broadcasts. **Te:** 25685 – **L.P:** Chmn. of Board: J. M. Helliwell. Dir. Gen: D. A. Stephen. Dep. Dir. Gen: J. C. Neill. Dir. African Sce: B. J. Gilbert. Dir. English Sces: J. Baldwin. Chief Eng: J. Grahame. A.M.I.E.R.E.
STATIONS: G=General & Comm. Sces; A=African & African Comm Sces.
Medium Waves:

	kc	kW	Sce.		kc	kW	Sce.
Salisbury	584	2	G	Que Que	1255	1	G
Gwelo	611	2	G	Bulawayo	683	2	G
Gwelo	710	2	A	Gatooma	791	2	G
Ft Victoria	855	1	G	Umtali	890	2	G
Salisbury	890	2	A	Bulawayo	1340	2	A

Short Waves: Gwelo (G.C: 29.51E/19.26S):

kc	m	kW	Sce.	kc	m	kW	Sce.	kc	m	kW	Sce.
3305	90.73	10	A –	5975	50.21	10	A –	7175	41.81	2.5	A
3396	88.36	20	G –	6020	49.83	20	G –				

HOME SCE: General Sce: W 03.55–21.00(Sat 22.00), Sun 05.55–12.00, 14.00–20.05 – **On 3396kc:** W 03.55–06.10, 15.00–21.00 (Sat 14.20–22.00). Sun 14.00–21.05. **On 6020kc:** W 06.15–14.55(Sat 14.15). Sun 05.55–12.00.
African Sce: 03.30(Sun 06.00)–20.10 – **On 3306kc:** W 03.30–06.05, 14.35–20.05. Sun 14.35–20.05.
NEWS IN ENGLISH: Gen. Comm. Sce: 04.00(W), 05.00(W), 06.00**, 09.00(Sun), 11.00, 11.10, 13.00(Sun), 16.00**, 17.45, 20.00. **African Comm. Sce:** 04.00(W), 09.00(Sun), 11.00, 11.10, 16.00, 17.45, 20.00. **=SABC.
ANN: E: "This is the Rhodesia Broadc. Corpo" – **INT-SIG:** 5 min's prior to opening English Sce. peal of Church Bells; 5 min's prior to opening African Sce, Kalimba Xylophone, drums – **V.** by QSL-card – **FI:** By Gov, license payments, adv–**ALF:** £6 (radio + TV), £2(radio only).

RWANDA (Republic of)

L.T: GMT+2 h – **Pr.L:** Kinyarwanda, Swahili, French.

RADIODIFFUSION DE LA REPUBLIQUE RWANDAISE (Gov.)

ADDR: B.P. 83, Kigali. **Te:** 442. **Cable:** "Radiorwanda". **L.P:** Chief of Inf. Sce: N. Buregeya.
STATION (G.C: 30.04E/01.57S): 6055kc 49.55m 50kW.
HOME SCE. in Kinyarwanda, Swahili, French & English: 03.30–07.00, 09.00–12.00(Sat/Sun 13.30), 13.30–21.00. **N. in French:** 04.30, 05.30, 11.00, 14.00, 18.00, 19.50. **N. in Kinyarwanda:** 04.00, 05.00, 06.00, 10.30, 15.00, 17.00, 18.30, 19.30. **N. in Swahili:** 03.30, 14.15, 17.15, 19.40 – **ANN:** "Ici Kigali, Station Nationale de Radiodiff. de la *République Rwandaise*" – **INT-SIG:** *Inanga (local harp)* – **V.** by QSL-card. Rp. Recordings accepted – **PUB:** Prgr. schedule free.

DEUTSCHE WELLE RELAY STATION AFRICA

ADDR: Kigali – **STATIONS:** One tr. 250kW (G.C: 30.07E/01.53S):

kc	m	kc	m	kc	m
9565	31.36	11905	25.20	15380	19.50
9735	30.82	15245	19.68	17765	16.89

D.PRGR: 03.00–03.30 & 03.45–05.30 on 9565kc, 05.45–07.45 on 11905kc, 09.45–11.45 on 9735kc, 12.00–14.00 on 17765kc, 14.00–14.45 on 15245kc, 15.00–17.30 on 9735kc, 17.45–19.45 on 17765kc, 20.00–23.00 on 15380kc. English: 04.30–05.00, 05.45–06.30, 10.45–11.15, 12.00–12.45, 16.45–17.30, 17.45–18.30. **German:** 20.00–23.00. For other details: see Germany.

SAHARA (Spanish)

L.T: GMT – **Pr.L:** Spanish, Vernaculars.

RADIO SAHARA (Gov.)

ADDR: Apartado 7, Aaiun – **L.P:** Dir. J. Zahonero Diaz. Dir. Prgr's & Adm: S. Valdueza Ayala.
STATION: 660kc 454.5m 2kW – **HOME SCE:** 12.00–16.00, 20.00–23.00. **Spanish:** 12.00–16.00, 21.00–23.00. **Hasania:** 20.00–21.00 – **N in Spanish:** 13.30, 14.30, 21.00 – **ANN:** "EAJ 103, Radio Sahara" – **V.** by QSL-card and letter. Recordings accepted.

Advertisement

telecommunication journal

In the increasingly international age in which we live, it is more important than ever that everyone connected with radio should be in touch with authoritative world opinion on radio matters.

The Telecommunication Journal, the official organ of the International Telecommunication Union (ITU), serves just this purpose. Since 1869 (when it first appeared as the "Journal Télégraphique") it has faithfully covered all aspects of telecommunications which come within the purview of the world organization (now a UN specialized agency) set up in 1865 to regulate them.

The journal contains

- a news section covering the activities of the ITU, of its Member Administrations and of private operating companies and highlighting technical advances in radio throughout the world –
- articles by world experts, with a heavy emphasis recently on the latest developments in space communications-
- a comprehensive list of articles of telecommunication interest appearing in the scientific press throughout the world –
- official ITU information, including lists of forthcoming ITU Conferences and other international telecommunication meetings –
- monthly sunspot predictions.

It is published monthly by the ITU in separate English, French and Spanish editions.

It costs 2 Swiss francs a copy. The annual subscription is 20 francs for one language edition, 30 francs for two and 40 francs for three.

For further information, write to: Telecommunication Journal, ITU, Place des Nations, Geneva, Switzerland.

AUTHORITATIVE • READABLE • COMPREHENSIVE

SAO TOMÉ E PRINCIPE (Port W.Africa)

L.T: GMT – Pr.L: Portuguese.

RADIO CLUBE DE SÃO TOMÉ (Comm.)
ADDR: Av. Infante D. Henrique, C.P. 44, São Tomé. Te: 530 – L.P: Pres: R. S. de Almeida Carvalho. Dir. Tec: F. R. Teixeira.
STATIONS: 749kc 400m 5kW – 4807.5kc 62.41m 1kW.
HOME SCE: W 06.00–07.30, 12.00–14.00, 17.00–22.30. Sun 08.00–22.30 – N: 06.50, 12.45, 19.30, 22.00 – Mbg (DX-QSL): Sat 20.00 (fortnightly) – ANN: "Aqui Portugal, Provincia de S. Tomé e Principe, fala-vos o R. Clube de S. Tomé transmitindo na..." – V. by QSL-card. Rp. Prgr.schedule free.

SENEGAL (Republic)

L.T: GMT – Pr.L: French, Ouolof, Sérére, Toucoulour, Portuguese.

RADIODIFFUSION DU SENEGAL (Gov.)
ADDR: B.P. 1765, Dakar. Cable: Radio Sénégal. Te: 320–72 – L.P: Dir. Gen: A. Diack. Asst. Dir: A. Fall. Dir. Tec: M. M'baye.
STATIONS: (G.C: 17.26W/14.39N):

kc	m	kW	Net	kc	m	kW	Net	kc	m	kW	Net
764	392.6	200	II	4950	60.60	4	I	11820	25.38	100	I
1538	196.0	10	I	7170	41.84	25	II	11895	25.22	100	I
4890	61.35	25	II	7210	41.61	4/100	I				

R. SENEGAL – INTER: 06.00–24.00.
On 1538kc: as above; On 4950kc: 06.00–08.00, 18.00–24.00; On 7210kc (4kW): 10.00–18.00.
To We. &Ce. Africa: 06.00–10.00 on 7210kc (100kW), 10.00–24.00 on 11895kc (100kW). Portuguese 18.00–18.20, Arabic 18.20–18.40, English 18.40–19.00.

R. SENEGAL II: 06.00–24.00.
On 764kc: as above. On 4890kc: 06.00–10.00, 18.00–24.00; On 7170kc: 10.00–18.00.

N. in French: (R. Senegal I+II): W 07.00, 07.55, 12.00, 13.00, 13.55, 19.00, 20.00, 22.15, 23.55. Sun 08.30, 13.00, 19.00, 20.00, 22.15, 23.55. Reg. st's: St. Louis (Sénégal III) 1484kc 202.2m 1kW: W 06.00–08.00, 12.00–14.00, 18.15–22.30. Ziguinchor (Sénégal IV) 3336kc 88.89m 4kW – 6070kc 49.42m 4kW (G.C: 16.16W/12.36N): 12.00–14.00, 18.00–21.30 on 3336kc. Sat/Sun 17.30–21.30 on 3336/6070kc.
ANN: F: "Ici Sénégal Inter émettant de Dakar sur..." – "Ici Sénégal II Chaine Nationale émettant de Dakar". E: "This is the English prgr. of the international Sce. of the Senegalese Broadc. System" – INT-SIG: Melody on "Khora" (local harp) – V. by QSL-card. Rp – AD: allowed.

SEYCHELLES (British)

L.T: GMT+4 h – Pr.L: English, French, Creole.
SEYCHELLES BROADCASTING SERVICE (Gov.)
ADDR: Dept. of Tourism & Inf, P.O. Box 92, Victoria. Te: 447. Cable: Tourism – L.P: Dir: D. O. Mathews, CMG, OBE. Mgr: E. C. Passmore CBE, AMIEE.
STATION: ZCQ3 1330kc 0.5kW – HOME SCE: 13.15–16.15 – N (BBC): 14.00. N. in Creole: W 16.10 – ANN: E: "This is R. Seychelles"
PUB: Prgr. schedule free.

SIERRA LEONE

L.T: GMT – Pr.L: English, Mende, Temne, Krio.
SIERRA LEONE BROADCASTING SERVICE (Gov.)
ADDR: New England, Freetown. Te: 4711-3. Cable: Broadcasts. L.P: Dir. of Broadc: P. F. George. Dir. of Prgr's: J. Findlay. Dir. Tec: P. F. George.
STATIONS: 1200kc 250m 10kW – 3316kc 90.46m 5/10kW – 5980kc 50.17m 0.5kW.
HOME SCE: 06.00–10.15, 13.00–13.30, 15.00–23.05. Sat 06.00–11.15, 13.00–23.05. Sun 06.00–09.30, 13.00–23.05.
N. in English(BBC): 07.00, 16.00, 20.00. Nat. N: 06.40 (Vernaculars, English), 18.00 (Vernaculars), 20.10 (English), 22.00 (English) – "African Magazine": Fri 21.00 – ANN: "This is the Sierra Leone Broadc. Sce" – INT-SIG: "The rain is coming" played by Military band – V. by letter. Recordings accepted.

SOMALI (Rep.)

L.T: GMT+3 h – Pr.L: Somali, Arabic, Italian, Swahili, English
NATIONAL BROADCASTING STATION (Gov.)
ADDR: Voice of the Somali Republic, Mogadiscio. Te: 444 – L.P: St. Dir. J. K. Tarah.

STATIONS (G.C: 45.20E/02.02N):
4970kc 60.36m 10kW – 6095kc 49.22m 50kW – 7160kc 41.90m 0.3kW.
HOME SCE: 03.00–05.00, 09.30–11.30, 12.00–15.30, 16.30–19.00 on 4970/6095/7160kc.
Somali: 03.00–03.15, 03.30–03.45, 04.00–05.00, 08.00–11.30, 12.00–15.00, 16.30–17.30, 18.45–19.00. N: 03.30, 08.10, 10.00, 13.00, 17.00, 18.50 – **English:** 03.15–03.30, 18.00–18.30. N: 03.15, 18.00– **Arabic:** 03.45–04.00, 17.30–18.00. N: 03.45, 17.30 – **Italian:** 10.45–11.00, 18.30–18.45. N: 10.45, 18.30 – **Swahili:** 15.00–15.30. N: 15.10–**ANN:** "Halkan wa R. Mogadiscio". E: "This is R. Mogadiscio, the Voice of the Somali Republic". I: "Qui parala la R. Mogadiscio, la Voce della Repubblica Somala" – **INT-SIG:** Guitar – V. by QSL-card.

RADIO SOMALI (Gov.)
ADDR: Reg. Information Office, P.O. Box 14, Hargeisa. **Te:** 155. Cable: Informat – **L.P:** Dir. Mustafa Haji Nur. Broadc. Officer: A. Dualeh.
STATIONS: (G.C: 44.03E/09.33N): 7120kc 42.13m 10kW – 11640kc 25.77m 5kW.
HOME SCE. in Somali: 09.00–09.30(Fri) only), 11.00–13.30, 15.00,–16.30. **N. in Somali** 12.00, 15.30.

ANN: "Halkani Wa R. Hargeisa" Odki Gamhoriyada Somalida" – **INT-SIG:** March – V. by QSL-card.

SOMALI (French)

L.T: GMT+3 h – **Pr.L:** French, Somali, Afar, Arabic.

OFFICE DE RADIODIFF. TELEVISION FRANÇAISE (ORTF)
ADDR: B.P. 97, Djibouti. **Te:** 177. **Cable:** Radiodiffusion – **L.P:** Dir: R. Marchand. Dir. Tec: L. Sebastien.
STATIONS (G.C: 43.00E/11.30N):
1538kc 195.0m 4kW – 4780kc 62.76m 4kW
HOME SCE: W 03.00–04.15, 09.00–11.30, 14.45–16.00 on 1538kc, 16.00–20.00 on 1538/4780kc. Sun 04.00–11.30, 14.45–16.00 on 1538kc, 16.00–20.00 on 1538/4780kc.
French: 03.00–04.15 (Sun 06.00–09.45) on 1538kc, 16.00–17.00 on 4780kc, 17.00–20.00 on 1538kc. **N:** 03.00, 04.00, 09.00, 17.00 – **Somali:** 10.00–10.45, 14.45–15.45 (Sun also 04.00–05.00) on 1538kc. N: 10.00, 15.00 – **Afar:** 10.45–11.30, 15.45–16.45 (Sun also 05.00–06.00) on 1538kc. N: 11.00, 16.00 – **Arabic:** 09.45–10.00, 16.45–17.00 on 1538kc, 17.00–20.00 on 4780kc. N: 09.45, 16.45.

ANN: F: "Ici Djibouti Office de Radiodiff. Télévision Francaise". Afar: "Ah Djibouti Radio". Arabic: "Houna Djibouti dar el Iza'a el Francia lil Radiowal Television". Somali: "Al kani wa Radio-Djibouti" – **INT-SIG:** Extrait d'une mélodie somalie – V. by letter and QSL-card. Rp. Recordings accepted.

SOUTH AFRICA (Republic)

L.T: GMT+2 h – **Pr.L:** English, Afrikaans, Bantu (S. Sotho, Zulu, Tswana, Xhosa, N. Sotho, Venda, Tsonga).

SOUTH AFRICAN BROADCASTING CORPORATION
ADDR: P.O. Box 8606, Johannesburg. **Cable:** Broadcast. **Te:** 231151. **L.P:** Chmn: Dr. P. J. Meyer. Dir. Prgrs: C. D. Fuchs. Dir. Finance: J. N. Swanepoel. Chief Eng: H. O. Collett. Head Publ. Rel: N. J. Naude. Head Comm. Sce: H. J. Howell. Head Ext. Sce: J. A. Jooste. Head English Sce: A. Falkiner. Head Afrikaans Sce: P. de Bruyn.

HOME SERVICES: National Medium-Waves: 0.5/1/2/5/10kW.

		English	Afrikaans	Comm.
Johannesburg:	kW	kc	kc	kc
West Rand	2	638	719	575
East Rand	2	1034	827	1286
Pretoria	2	1439	1097	1268
Bloemfontein	5	674	593	782
Kimberley	0.25	1070	1241	962
Grahamstown	2	620	701	809
Port Elizabeth	5	1313	1043	1178
East London	2	683	791	602
Cape Town	5	656	557	728
Durban	2	566	692	800
Pietermaritzburg	2	764	665	845
Pietersburg	5	1115	863	989

D.PRGR: English, Afrikaans: 03.30–21.15 (incl. Bantu Prgr's W 03.30–04.30, 07.30–08.00) – **N: English:** 05.00, 06.00, 09.00, 11.15, 14.00, 16.00, 17.00, 19.00, 21.00, 02.55. **Indian Prgr:** Sat 11.45–12.00, Sun 06.30–07.30 on 566/764kc. **Afrikaans:** 04.45, 06.00, 09.00, 11.15, 14.00, 16.00, 17.00, 19.00, 21.00, 22.03.

Comm. Sce. (Springbok R): W 03.00–22.00, Sun 04.00–22.00 – **N: English:** W 04.30, 05.30, 09.29, 11.00, 14.29, 17.00, 20.30; Sun 11.00, 16.30. **Afrikaans:** W 03.45, Sun 06.30, 19.30.

National Shortwave Stations (Paradys) 20kW (G.C: 26.13E/29.13S):

English Sce.		Afrikaans Sce.		Comm. Sce.		R. So. Africa	
kc	m	kc	m	kc	m	kc	m
2326	129.50	2346	128.0	2376	126.3	3250	92.31
3285	91.32	3320	90.34	3250	92.31	4945	60.67
4875	61.54	4810	62.37	4945	60.67		
6095	49.22	6005	49.96	6150	48.78		
7275	41.24	7230	41.49	7185	41.75		
9680	30.99	9650	31.09	9720	30.86		

Wave bands in use and times of operation on various freq's are changed to suit propagation conditions.

INTERNAL SHORTWAVE SCHEDULE

Times (approx.)	English kc	Afrikaans kc	Comm. Sce. kc
04.30–05.10	4875, 6095, 7275	4810, 6005, 7230	4945, 6150, 7185
05.10–07.15	6095, 7275, 9680	6005, 7230, 9650	6150, 7185, 9720
07.15–16.20	7275, 9680	7230, 9650	7185, 9720
16.20–18.15	6095, 7275	6005, 7230	6150, 7185
18.15–21.15	4875, 6095	4810, 6005	4945, 6150
21.15–04.30			4945, 6150

English Sce: W 04.30–21.15(Sat 22.05), Sun 05.00–21.15 – **N:** 05.00(W), 06.00, 09.00(Mon–Fri), 11.15, 14.00(Mon–Fri), 16.00, 17.00(W), 19.00, 21.00. **Reg. N:** 05.15(on sw. to So. We. Africa)(W), 11.25(W), 17.10 (W) – **Greek:** Sun 08.00–08.20. **Portuguese:** Sun 08.20–08.40 – **Indian Prgr:** (in English) on 566/764kc: Sat: 11.45–12.00, Sun 06.30–07.30 – **R. Bantu** (on mw): 03.00–04.30(W), 04.00–05.00(Sun), 07.30–08.00(D).

Afrikaans Sce: W 04.30–21.15(Sat 22.05), Sun 05.00–21.15 – **N:** 04.45 (W), 06.00, 09.00(Mon–Fri), 11.15, 14.00(Mon–Fri), 16.00, 17.00(W), 19.00, 21.00. **Reg. N:** 05.15(on sw. to So. We. Africa)(W), 11.25(W), 17.10(W) – **German:** Mon 20.20–20.40. **Italian:** Mon 20.40–21.00 – **R. Bantu**(on mw): 03.00–04.30(W), 04.00–05.00(Sun) 07.30–08.00(D).

Springbok Radio (Comm. Sce,) in English, Afrikaans: 03.00(Sun 04.00)–22.00 – **N: English:** 04.30(W), 05.00(Sun), 05.30(W), 09.29(W), 11.00, 14.29(Mon–Fri), 16.30(Sun) 17.00(W), 20.30(W). **Afrikaans:** 03.45(W), 06.30(Sun), 19.30(Sun) – **Wrp:** W 03.55, 04.58, 05.45, 20.35. Sun 19.35.

ANN: E: "This is the English Sce. of R. South Africa". Afrikaans: "Dit is die Afrikaanse diens van R. Suid-Afrika". Springbok R: "This is the National Netw. of Springbok R. your st. for brighter broadcasting".

INT-SIG: English Sce: Dove-Call. Afrikaans Sce: Musical box "Vêr in die Wêreld Kittie" at 04.28(on sw) followed by Dove-Call. Springbok R: Opens and closes with an orchestral arrangement of the folk tune "Vat jou goed en trek Ferreira"; Gong.

FM-SERVICES:	kW	English Mc	Afri-kaans Mc	Spring-bok Mc	Reg. Comm. Mc
Johannesburg	10	95.51	103.42	99.47	87.60a
Welverdiend	3	93.71	89.75	97.66	(plann.)
Rustenburg	3	102.99	106.95	95.08	–
Pretoria	5*	88.98	96.89	92.93	90.01b
Durban/Pietermaritzb.	10	90.01	105.83	93.96	(plann.)
Constantiaberg	3	89.49	105.32	97.40	101.36b
Table Mountain	0.25	106.69	102.74	90.87	98.78b
Port Shepstone	3	102.65	90.78	98.69	–
Cala	0.8**	95.86	103.72	99.81	–
Umtata	0.8**	97.66	93.71	89.75	–
Port Elizabeth	3	103.51	99.55	87.69	–
Grahamstown	3	93.45	101.36	89.49	–
Keiskammahoek	3	100.59	92.67	104.54	–
East London	3	107.12	95.25	91.30	–
Bloemfontein	3	103.94	88.12	96.03	107.90a
Theunissen	3	103.17	99.21	107.12	95.25a
Napier	3	99.21	95.25	103.17	107.12b
Butterworth	3	102.39	98.44	106.35	–
Kroonstad	3	90.52	94.48	102.39	98.44a
Greytown	3	107.21	103.25	91.38	–
Kimberley	3	106.09	102.13	98.18	94.23a
Piketberg	3	99.81	95.86	107.72	91.90b
Piet Retief	3	89.84	93.76	101.70	–
Vryheid	3	102.48	98.52	94.57	–
Villiersdorp	3	94.48	102.39	90.52	98.44b
Queenstown	3	94.05	90.09	101.96	–
Middelburg (Tvl)	3	90.78	106.61	94.74	–
Eshowe	3	105.06	101.10	89.23	–
Boesmanskop	3	104.37	92.50	88.55	–
Ladybrand	3	89.92	101.79	105.75	–
The Brook	3	95.17	91.21	99.12	–
Davel	3	93.36	89.41	97.32	–
Mooiriver	3	105.40	97.49	89.58	–
Senekal	3	101.02	97.06	93.10	–
Riversdale	3	104.20	96.29	92.33	–
Volksrust	3	95.94	91.99	99.90	–
Bedford	3	102.74	98.78	94.82	–
Mount Ayliff	3	92.93	88.98	96.89	–

FM	kW	English Mc	Afri-kaans Mc	Spring-bok Mc	Reg. Comm. Mc
Nelspruit	3	90.44	102.31	94.39	–
Potgietersrust	3	103.25	95.34	107.21	–
Ottoshoop	3	89.32	105.15	93.82	–
George	3	102.05	106.01	90.18	–
Sea Point	0.05	101.97	93.71	105.92	–

* Reg.Comm.Sce 0.8kW – ** Springbok R. 3kW.

Reg. Comm. Sce: in English, Afrikaans: 03.00(Sun 04.00)–22.00 (a) R. Highveld (b) R. Good Hope – **N: English:** 05.00, 07.00, 09.00, 11.00, 13.00, 15.00, 17.00, 19.00, 21.00. **Afrikaans:** 04.00, 06.00, 08.00, 10.00, 12.00, 14.00, 16.00, 18.00, 20.00.

R. South Africa All Night Sce(Comm) in English, Afrikaans: D 22.00–03.00(Sun 04.00) – **N: English** 02.45, **Afrikaans** 22.01 on all Reg. Comm. Sce. FM fqs. and also on all mw & FM fqs. of Springbok R. plus sw 3250/4945kc(Sept–May), 2376/3250kc(May–Sept).

Radio Bantu (FM Sce. in Vernaculars):

So Sotho	kW	Mc	Zulu	kW	Mc
Johannesburg	10	91.56	Port Shepstone	3	106.61
Welverdiend	3	101.62	Port Shepstone	3	*94.74
Bloemfontein	10	92.07	Greytown	3	95.34
Theunissen	3	91.30	Piet Retief	3	105.66
Kroonstad	3	106.35	Vryheid	3	90.19
Boesmanskop	3	100.41	Middelburg(Tvl)	3	102.65
Ladybrand	3	93.88	Middelburg(Twl)	3	98.69
Senekal	3	89.15	Eshowe	3	93.19
Rustenburg	3	*99.04	The Brook	3	103.08
Pretoria	3	*100.84	Davel	3	105.23
			Mooiriver	3	93.53
Tswana	**kW**	**Mc**	Volksrust	3	88.03
Welverdiend	3	105.57	Nelspruit	3	98.35
Rustenburg	3	99.04			
Pretoria	5	100.84	**Xhosa**	**kW**	**Mc**
Bloemfontein	10	99.98	Constantiaberg	3	93.43
Kimberley	3	90.27	Table Mt.	0.25	94.82
Ottoshop	3	97.24	Pt. Shepstone	3	94.74
			Cala	3	91.90
No. Sotho	**kW**	**Mc**	Umtata	3	105.57
Pretoria	5	104.80	Pt. Elizabeth	3	91.64
Middelburg(Tvl)	3	98.69	Grahamstown	3	105.32
Potgietersrust	3	99.30	Keis Kammahoek	3	88.72
			East London	3	103.71
Zulu	**kW**	**Mc**	Butterworth	3	90.52
Durban/			Queenstown	3	105.92
Pietermaritzburg	10	97.92	Bedford	3	90.87
Johannesburg	10	107.38	Mt. Ayliff	3	100.84

x=08.40–15.00.

So. Sotho/Zulu: W 03.00–21.00, Sun 04.00–20.30 – **N:** 03.30(W), 04.15, 07.30, 08.30, 11.30, 15.00, 17.30, 19.15, 20.30(W).

No. Sotho/Tswana/Xhosa: W 03.00–08.40, 15.00–21.00, Sun 04.00–08.40, 15.00–20.30 – N: 03.30(W), 04.15, 07.30, 08.30, 15.00, 17.30, 19.15, 20.30(W).

Venda/Tsonga: W 03.00–04.30, Sun 04.00–05.00 – D 07.30–08.00. N: 03.30(W), 04.15, 07.30.

R. Bantu prgr's are also relayed over the mw tr's. of the English and Afrikaans Sces. at 03.00–04.30(W) 04.00–05.00(Sun) & 07.30–08.00(D).

So. Sotho on 719/827/593/1241kc, **No. Sotho** on 863/1097kc, **Venda/Tsonga** on 1115kc, **Zulu** on 566/764/638/1034/665/692kc, **Tswana** on 1439/1070/674kc, **Xhosa** on 557/656/791/683/1043/1313/701/620kc.

EXTERNAL SERVICES

RADIO RSA – "THE VOICE OF SOUTH AFRICA"

STATIONS: Bloemendal 2 × 250kW tr's (Brown Boveri) – Paradys 2 × 20kW tr's (Marconi) (G.C: 28.08E/26.35S):

kc	m	kc	m	kc	m	kc	m
5980	50.17	9720	30.86	15205	19.73	17805	16.85
7270	41.27	11785	25.46	15220	19.71	17815	16.84
9525	31.50	11880	25.25	15285	19.63	21495	13.96
9675	31.01	11900	25.21				

I = Kenya/Uganda/Tanzania; II = Middle East; III = Rhodesia/Zambia/Malawi; IV = Libya/Egypt/Jordan; V = Congo; VI = Moçambique; VII = Angola; VII Morocco/Algeria/Tunisia; IX = Ghana/Nigeria; X = Africa General; XI = Congo/Morocco/Algeria/Tunisia/Cameroon/Gabon/Niger; XII = UK/Europe; XIII = Canada (Eastern); XIV = USA (Eastern & Central); XV = Canada (Central); XVI = USA/Canada (Western).

Times	Areas	Nov.–March (kc)	Language
*04.00–04.12	I	11900, 15220	Zulu
*04.15–04.27	I	11900, 15220	English
*04.30–04.42	II	9525, 11900	English
*04.45–04.57	I	11900, 15220	Afrikaans
*05.00–05.12	III	7270, 9525	English
*05.15–05.27	IV	11900, 15220	English
*05.30–05.42	V	11900, 15220	French
*05.45–05.57	VI	7270, 9525	Portuguese
*06.00–06.12	III	7270, 9525	Afrikaans
*06.15–06.27	VII	9525, 11900	Portuguese
*06.30–06.42	VIII	11900, 15220	French
*06.45–06.57	IX	11900, 15285	English
10.00–14.55	X	11900, 15220 17805, 21495	English/ Afrikaans
15.00–15.55	I	11900, 15220, 17805, 21495	Zulu/ Swahili
16.00–16.55	III	9525, 11900	English
17.00–17.55	I	11900, 15220, 17805, 21495	English
18.00–18.55	VI	5980, 7270	Portuguese
19.00–19.55	XI	11900, 15220, 17815, 21495	French
20.00–20.55	VII	9525, 11900	Portuguese
21.00–21.55	IX	11900, 15285	English
22.00–22.55	XII	9720, 11785, 15205	English
23.30–00.25	XIII	9675, 11880	English
00.30–01.25	XIV	9675, 11880	English
01.30–02.25	XV	9675, 11880	English
02.30–03.25	XVI	9675, 11880	English
**08.00–09.55	I/III	11900, 15220, 17805, 21495	Afrikaans

* W. only. ** Sun only.

NEWS: English: 04.15(W), 04.30(W), 05.00(W), 05.15(W), 06.45(W), 11.15, 16.00, 16.52, 17.00, 17.52, 21.00, 21.52, 22.00, 22.52, 23.30, 00.22, 00.30, 01.22, 01.30, 02.22, 02.30, 03.22 – **French:** 05.30, 06.30, 19.00, 19.52 – **Portuguese:** 05.45, 06.15, 18.00, 18.52, 20.00, 20.52. **ANN:** "This is Radio RSA, the Voice of South Africa" – **INT-SIG:** Call of Bookmakierie, South African bird, mixed with tune of "Ver in die Wêreld Kietie" – **V.** by QSL-card – **F.PL:** 2 × 100kW sw-tr's for realy of English & Africans Sce's to So. We Africa.

SUDAN

L.T: GMT+2 h – **Pr.L:** Arabic.

SUDAN BROADCASTING SERVICE (Gov.)

ADDR: P.O. Box 572, Omdurman. **Cable:** Izaa – **L.P:** Sen, Contr: M. S. Fahm. Contr: M. E. Obeid.

STATIONS (G.C: 32.28E/15.30N): 50kW(mw)/20kW(sw); * variable. 960kc 312.5m – *4945kc 60.67m – 9508kc 31.55m.

HOME SCE: Arabic: 04.00–05.30, 06.00–09.00, 11.00–13.00 (Fri 06.00–13.00), 14.00–21.00 – **Local Prgr. for So. Provinces:** 13.00–14.00 – **European Prgr:** 05.30–06.00. **N: Arabic:** 04.30, 06.00, 12.30, 13.15**, 15.00, 17.00, 19.30, 20.45 (** simplified Arabic for So. provinces). **English:** 05.30 (exc. Mon, Thurs, Fri), 13.30 (Fri only). **French:** 05.30 (Mon, Thurs). **Swahili:** 13.45 (D. exc. Fri) – **ANN:** Arabic: "Huna Omdurman". E: "This is the Sudan Broadc. Service" – V. by letter.

SWAZILAND (Brit. Protectorate)

L.T: GMT+2 h – **Pr.L:** English, Vernaculars.

TIGER RADIO (Military owned, for Forces Entertainment only)

ADDR: BFPO 640, Matsapa – **L.P:** St. Dir: Capt. M. Cross.

STATION: 746kc 0.075kW – **HOME SCE. in English: D** 11.00–11.30, 16.00–18.00. **N:** 11.00, 16.00 – **ANN:** "Tiger Radio – Voice of the British Army in Swaziland".

SWAZILAND BROADCASTING SERVICE (Gov)

ADDR: P.O. Box 338, Mbabane. **Te:** 761 – **L.P:** Dir. of Broadc: I. B. Aers. Dir. Tec: J. Ansell – **STATION:** 881kc 10kW – **HOME SCE:** 15.30–19.15 in Siswati, English – English 16.00–16.15 (N from BBC), 18.10–19.15 – **N:** (W 18.10) – **ANN:** "Lena Swajiland Broadc. Service". "This is the Swaziland Broadc. Service" – **V.** by letter – **F.PI:** Lunchtime prgr (10.30–12.00) from Jan. 1st, 1967.

TANZANIA

L.T: GMT +3 h – **Pr.L:** Swahili, English.

RADIO TANZANIA (Gov.)

ADDR: Box 9191, Dar es Salaam. **Te:** 63342. **Cable:** Sauti.

L.P: Dir. of Broadc. & Chief Eng: Y. Kazibure. Prgr. Officer: S. Mlatie. Press Officer: A. Cheche.

STATIONS: (G.C: 39.14E/06.50S):

kc	m	kW	kc	m	kW	kc	m	kW
638	470	100	3251	92.58	5	7165	41.87	20
836	359.0	1.25	4785	62.70	10	7280	41.21	10
1025	292.7	1.25	5050	59.41	20	9530	31.48	5
1250	240.0	1.25						

HOME SCE: National Prgr (Kiswahili): W: 03.15–05.00 on 836/3251/5050kc, 09.00–10.30 on 836/7165kc (Sat 09.00–13.30 on 836/7165/9530kc), 13.00(Sat 13.30)–18.45 on 836/3251/5050kc, 18.45–20.00 on 836/3251/4785kc. **Sun:** 03.15–05.00 on 836/3251/5050kc, 05.00–07.00 on 836/5050kc, 07.00–13.30 on 836/7165/9530kc, 13.30–15.00 on 836/

5050kc, 15.00–18.45 on 836/3251/5050kc, 18.45–20.00 on 836/3251/4785kc – N: 04.00*, 10.00, 13.00, 15.00, 17.00*, 19.00* (* incl. wrp).
Second Prgr (English): W 09.00–10.30(Sat 14.30) on 1025/7280kc, 16.00(Sat 14.30)–18.45 on 1025/4785kc. Sun 05.00–14.30 on 1025/7280kc, 14.30–18.45 on 1025/4785kc – N: 10.00, 16.00, 18.00* (* incl. wrp).
Third Prgr (Educ) in Swahili & English: 14.00–16.00 on 1250/4785kc. N: 14.00 – **Comm. Sce. on 638kc:** 03.00–05.00, 09.00–11.00, 15.00–21.00. N: 04.00, 10.00, 16.00, 17.00, 19.00 – **School Prgr** (Mon–Fri): 08.00–09.00, 12.00–13.00 on 836/7165/9530kc.

EXTERNAL SCE. in English, Portuguese, Sena, Zulu and Herero: D 18.45–20.00 on 5050kc – N: English 18.45, Portuguese 19.00.
ANN: "This is R. Tanzania, Dar es Salaam". Kiswahili: "Hii ni R. Tamzania, Dar es Salaam".
INT-SIG: Celeste:

V. by QSL-card – **F.PL:** 100kW sw-tr by end of 1966 – **FI:** By Gov & adv – **ALF:** £ 1/–/–.

RADIO TANZANIA ZANZIBAR (Gov.)

ADDR: P.O. Box 1178, Zanzibar, Tanzania. **Te:** 2928. **Cable:** Broadcasts – **L.P:** Chief Inf. & Broadc. Officer: J. R. Nasibu. Dir. Tec: M. A. Suleiman.
STATIONS (G.C: 39.12E/06.09S): 600kc 500m 2kW
3339kc 89.80m – 4795kc 62.54m – 6005kc 49.96m – 9550kc 31.41m (all 10kW) – **HOME SCE. in Kiswahili:** 03.30–04.30, 11.00–12.00, 14.00–18.00. Sun also 07.00–10.00 – **ANN:** Kiswahili: "Hii ni R. Tanzania Zanzibar" – **INT-SIG:** Musical Chords – **ALF:** £ 0/10/0.

TOGO (Republic)

L.T: GMT – **Pr.L:** Ewe, Cotocolis, Cabrais, Hausa, Moba, Bassari.

RADIODIFFUSION DU TOGO (Gov.)

ADDR: B.P. 434, Lomé. **Te:** 2492. **Cable:** Radio Togo – **L.P:** Dir: G. Ekue. Dir. Tec: L. Poenou.
STATIONS (G.C: 01.12E/06.16N):
1394kc 215.0m 1kW – 5047kc 59.44m 4/100kW – 7265kc 41.29m 4/100kW.
HOME SCE. in French, Vernaculars: W 05.30–08.00, 17.30–23.00 on 1394/5047kc; 12.00–14.00(Sat 17.30) on 1394/7265kc. Sun 06.00–10.00, 17.30–23.00 on 1394/5047kc, 10.00–17.30 on 1394/7265kc. N: **French:** 05.35(W), 06.03(Sun), 06.30(W), 07.30(Sun), 07.57(W), 10.08(Sun), 12.30, 13.57, 17.30(W), 19.30, 22.15, 22.57. **Vernaculars:** 06.00, 06.05(W), 13.00, 13.10, 17.35, 17.45, 17.55, 18.05, 18.15, 18.35. Sun 13.00, 13.10, 18.15, 18.35. **English:** 12.45, 21.00.
INT-SIG: Solo (on African bow):

ANN: "Ici Lomé Radiodiffusion du Togo". At opening and close down: Hymne Togolais – V. by QSL-card. Rp. Re. in F, E. Recordings accepted – **PUB:** Prgr.sched. (weekly) – **ALF:** CFA 500,–.

TUNISIA

L.T: GMT+1 h – **Pr.L:** Arabic.

RADIODIFFUSION TELEVISION TUNISIENNE (Gov.)

ADDR: 139, Avenue de Paris, Tunis. **Te:** 259311 – **L.P:** Dir. Gen: M. Mohamed Mzali. Dir. Foreign Rel: M. Akrout. Dir. Tec: M. Chaffai.

HOME SERVICE

ARABIC NETWORK: Nat Prgr: 05.00(16/6–30/9: 04.30)–23.30. Tunis I 629kc 477m 600kW – **FM:** 96.5Mc 3kW.
6195kc 48.43m 50kW: 05.00–06.00, 17.00–23.30 to Mid East/No. Af. 11970kc 25.06m 50kW: 06.00–17.00 (to Mid East).
G.C.(sw-tr's): 09.56E/36.50N.
N, Wrp: 06.00, 12.00, 16.00, 19.00, 23.00.
Sfax I 584kc 513.7m 0.05kW – Sfax II 602kc 498.4m 5kW.
12.00–16.00, 19.30–21.00 – **N, Wrp:** 13.00, 14.00, 19.00, 20.55.
INTERNATIONAL NETWORK: Tunis II 962kc 312m 100kW – **FM:** 90.1Mc 3kW. **French:** 05.30–13.30, 16.00–22.00. N: 05.30, 12.15, 18.30, 21.30 – **Italian:** 13.30–14.30 – **ANN:** Arabic: "Huna Al-Idha – A Att-Tounoussia". F: "Ici Tunis Radiodiff. Télévision Tunisienne". I: "Radiodiff. Tunisina, Rete Internazionale Programma Italiano" – V. by QSL-card. Re. in Arabic, E, F. Recordings accepted – **PUB:** R. Revue "Al Idha'a in French, Arabic (free)".

UGANDA

L.T: GMT+3 h – **Pr.L:** English, Luganda, Lwo, Ateso, Runyoro, Rutuoro, Runyankore/Rukiga, Hindustani.

RADIO UGANDA (Gov.)

ADDR: Ministry of Inf, Broadc, and Tourism, P.O. Box 2038, Kampala. **Te:** 57251. **Cable:** Radioad – **L.P:** Permanent Secr: A. Sibo. Ag. Contr (Prgr's): R. Sempa. Chief Eng: H. F. Humphreys.
STATIONS mw: 1/2/50kW, sw: 3/8kW (G.C: 32.36E/00.20N).

kc	m	Netw.	kc	m	Netw.	kc	m	Netw.
584	514.0	Blue	3340	89.81	Red	7110	42.19	Blue
656	457.3	Blue	4976	60.29	Red	7195	41.70	Red
728	412.0	Red	5026	59.70	Blue			

HOME SCE: Red Network (Nat, No. Reg, Hindi Prgr's): 03.25–05.45 on 728/4976kc, 06.00–11.30 (Sun 14.00) on 728/7195kc, 14.00 (Sun 14.15)–21.02 on 728/4976kc – N. **in English:** 04.00, 05.00, 06.00, 09.00 (Mon–Fri), 09.15 (Sun), 10.00 (Mon–Fri), 17.00, 18.00, 20.00 (exc. Sat), 21.00.
Blue Network (Nat, Midland & We. Reg. Prgr's): 03.45–05.45 on 584/656/5026kc, 06.00–11.30 (Sun 14.00) on 584/656/7110kc, 14.00 (Sun 14.15)–21.02 on 584/656/5026kc.
N. in English: 04.00, 05.00 (Sat/Sun), 06.00 (Sat/Sun), 09.00 (Mon–Fri), 09.15 (Sun), 10.00 (W), 18.00, 20.00 (exc. Sat), 21.00.
ANN: E: "This is R. Uganda, Kampala". Luganda: "Eno ye R. Uganda, Kampala". Lwo: "Man en aye R. Uganda, Kampala". Rutooro: "Enu ni R. Uganda, Kampala". Ateso: "Ne nges R. Uganda, Kampala". Rukiga: "Egi ni R. Uganda, Kampala". Hindustani: "Yeh R. Uganda, Kampala, Hai" – V. by QSL-card. Recordings accepted – **F.PL:** 3 ch. tr's.

UPPER VOLTA (Republic)

L.T: GMT – **Pr.L:** French + 13 vernacular languages.

RADIODIFFUSION DE HAUTE-VOLTA (Gov.)

ADDR: B.P. 511, Ouagadougou. **Te:** 2214. **Cable:** Radiovolta – **L.P:** Dir: R. Zongo Dir. of Prgr's: A. Yameogo. Dir.N: R. Nikiema. Dir. Tec: A. Poirier.
STATIONS (G.C: 01.31W/12.22N): 1439kc 208m 1kW – 4815kc 61.31m 25kW – 7230kc 41.49m 4kW.
HOME SCE. in French, Vernaculars: W 06.00–08.00, 12.00–14.00, 17.00–23.00(Sat 12.00–23.00). Sun 07.00–23.00 – N. **in French:** 06.30 (W), 07.45, 12.05, 12.45, 19.10, 20.00, 22.15, 22.55 – **Wrp:** W 12.40 – **Vernaculars:** Peulh 17.45, Mossi 18.00, Dioula 18.11, Gourounsi 18.22, Gourmantsché 18.33, Lobi 18.44, Bobo 18.55, Senoufo 19.06.
R. BOBO-DIOULASSO – ADDR: B.P. 392, Bobo-Dioulasso. Te: 69. **Cable:** Radio Volta Bobo – **L.P:** St. Mgr: P. Barry. Dir. Tec: P. C. Songre – **STATION:** 1520kc 197.4m 1kW – Relay Ouagadougo in French: W 06.25–08.00, 12.00–13.30, 19.00(Sat 18.00)–22.00. Sun 11.00–17.00, 19.00–22.00.
ANN: "Ici Ouagadougou, Radiodiff. de la Haute-Volta èmettant..." – **INT-SIG:** Folklore Music (Balafon) – V. by QSL-card or letter. Rp.

ZAMBIA

L.T: GMT+2 h – **Pr.L:** English, Bemba, Nyanja, Tonga, Lozi, Lunda, Luvale, Kaonde.

ZAMBIA BROADCASTING SERVICES (Gov. Dept.)

ADDR: Broadc. House, P.O. Box RW 15, Lusaka; P.O. Box 748, Kitwe. **Te:** 72986. **Cable:** Broadcasts – **L.P:** Dir: A. M. Kittermaster. Chief Eng: A. Davies. Contr's: A. Nkhata. E. Lubinda. G. Wykes.
STATIONS: Medium Waves

	kc	m	kW	Sce.		kc	m	kW	Sce.
Lusaka	962	312	2	General	Livingstone	650	461	2	General
Lusaka	698	430	2	Home	Broken Hill	596	505	2	General
Kitwe	548	547	20	General	Ndola	1215	247	1	General
Kitwe	746	402	20	Home					

Short Waves (Lusaka): G.C: 28.15E/15.30S:

kc	m	kW	Sce.	kc	m	kW	Sce.
2355	127.4	2.5	General	4965	60.42	20	Home
2455	122.2	10	Home	6060	49.50	20	Home
3270	91.75	120	General	6165	48.66	120	General
3346	89.68	20	Home	9570	31.35	20	General
4911	61.08	20	General				

D.PRGR'S: General Service (English, Vernacular): 03.45(Sun 05.00)–06.30 on 3270kc, 06.30–14.30 on 4911kc, 14.30–21.00(Sat 22.00, Sun 20.10) on 3270kc. N. **in English:** W 03.45, 04.00, 05.00, 06.00, 09.00, 11.15, 16.00, 18.00, 20.00, 21.00. Sun 07.00, 11.15, 16.00, 18.00, 20.00.
Home Sce: (Vernaculars): 03.45–06.00(W) on 3346kc, 06.00–15.00 on 4965kc, 15.00–21.00(Sun 20.00) on 3346kc. N (Vernaculars): 03.45, 03.50, 03.55, 04.00, 04.30, 08.50, 10.45, 11.15, 13.45, 16.10, 17.15, 18.00.
ANN: Gen. Sce: "This is Lusaka Calling" or "You are tuned to the General (Home) Sce. of R. Zambia" – **PUB:** Monthly prgr. schedule – **F.PL:** Tr. at Ft. Jameson, expansion sces, VHF – **FI:** by state, license fees, adv – **ALF:** £ 5 (radio+tv), £ 1 (radio only).

ASIA

ADEN (Federation of South Arabia)

L.T: GMT+3 h – Pr.L: Arabic.

SOUTH ARABIAN BROADCASTING SERVICE (Gov. Comm.)

ADDR: P.O. Box 1264, GPO, Aden. Te: 4875. Cable: "Al Irshad" – L.P: Dir. Tec: B. V. Hughes. Dir. Prgr: H. Safi. Sales Mgr: N. Hassanali.
STATIONS (System: Marconi): 755kc 397m 50kW
5060kc 59.29m 7.5kW d. (G.C: 44.54E/12.48N).
HOME SCE. in Arabic: D. exc. Fri 03.30–06.00, 12.00–19.30. Fri 03.30–19.30. N: 03.55, 04.45, 06.45(Fri 11.00), 13.00, 15.00, 17.00, 19.00 – ANN: "Idha'at ue ganoub al Arabi men Aden" – V. by QSL-card. Rp. preferred. Re. wanted from Arabic speaking countries only.
PUB: Prgr. schedule free.

BRITISH FORCES BROADC. SCE. ADEN

is operated by the Ministry of Defence to provide a service of inf, entertainment as well as a link with home for H.M. Forces stationed in Aden and the Persian Gulf. It is non-comm, does not accept adv.
ADDR: Steamer Point, B.F.P.O. 69, Aden. L.P: St. Contr: P. Buckle. Sen. Eng: P. J. Keable. Prgr. Org: J. V. Nicholl.
STATION (System: Marconi): 1241kc 242m 10kW – D.PRGRS: W 02.45–05.15, 09.45–20.10(Sat 21.00). Sun 04.00–20.10. N (BBC): 03.00, 04.00, 05.00, 11.00, 14.00, 16.00, 18.00, 20.00.
V. by letter (Rp. only).

ADEN FORCES BROADCASTING ASSOCIATION

(Military Amenity operated by volunteer members)
ADDR: Royal Air Force, BFBO69, Khormaksar. L.P: Gen. Mgr: Wing Commander V. Bridges. Dir. Tec: Squadron Leader: J. J. Burke.
STATION: 835kc 359.3m 0.25kW – HOME SCE. in English: W 05.15–09.35, 12.55–20.20. Sun 05.55–20.10. N (rel. BBC/WS): 06.00, 09.15, 13.00, 16.00(W), 20.00 – ANN: "You are tuned to the Aden Forces Broadc. Assoc." – V. Reports not wanted.

Perim Island

BBC – MIDDLE EAST RELAY STATION

Relays of BBC Arabic, English, Somali Sce's for Middle East & East Africa.
STATION: 701kc 428m 100kW: 03.00–07.15, 09.15–21.00.
D.PRGRS: English: 03.00–03.45, 05.45–07.15, 09.15–11.00. Arabic: 03.45–05.45, 11.00–16.30, 17.00–21.00. Somali: 16.30–17.00.

AFGHANISTAN

L.T: GMT+4½ h – Pr.L: Pushtu, Dari.

RADIO AFGHANISTAN (Gov.)

ADDR: Ansari Watt, Kabul. Te: 24585. Cable: Techrad – L.P: Pres: A. R. Benawa. Dir. Prgr: Dr. M. Habibi. Dir. Tec: M. K. Atai.
STATIONS: (G.C: 69.12E/34.31N). Mw's 20kW, SW's 50kW –

kc	m	kc	m	kc	m	kc	m
660	454	4475	62.83	9635	31.14	*15225	19.65
1310	229	*6000	50.00	*11865	25.28	* Summer only.	
3214	93.75	7200	41.67	*11955	25.09		

HOME SCE. in Pushtu/Dari: 01.30–03.30 on 1310/3214kc, 07.30–08.30 on 660/3214/4775kc, 11.30–13.30 on 660/1310/4775/7200kc, 13.30–14.30 on 660/1310/4775kc, 14.30–17.00 on 660/1310/4775/7200kc, 17.00–17.30 on 660/1310/4775kc, 17.30–18.30 on 660/1310kc. On 7200kc: 13.30–14.30 & 17.00–17.30 Urdu, English & Russian to Afghanistan and neighbouring countries (13.30 Urdu, 14.00 English, 17.00 Russian).
FOREIGN SCE: 17.30–19.30 on 7200/9635kc.
Arabic: 17.30–18.00, French: 18.00–18.30, German: 18.30–19.00, English: 19.00–19.30 – ANN: "Da R. Afghanistan Kabul Dai" – INT-SIG: A record on national flute – V. by QSL-card. Recordings accepted.

BAHRAIN

L.T: GMT+4 h – Pr.L: Arabic.

BAHRAIN BROADCASTING STATION (Gov.)

ADDR: P.O. Box 253, Manama, Bahrain, Arabian Gulf. Te: 612278 – STATION: 610kc 491.8m 2kW – HOME SCE. in Arabic: D 05.30 (Fri 04.00)–08.00, 16.00–19.30 – N: 07.55, 17.30 – Wrp: 17.45 – ANN: Arabic: "Hunal Bahrain" (This is Bahrain) – INT-SIG: Local composition of guitar and violin – V. by letter – PUB: "Hunal Bahrain" monthly, free on request.

BRUNEI (British Protected State)

L.T: GMT+8 h – Pr.L: Malay, English, Chinese.

RADIO BRUNEI (Gov.)

ADDR: Dept. of Broadc. & Inf, Brunei. Cable: Infoff. Te: 345 – L.P: Dir. of Broadc. & Inf: G. V. De Freitas. Dep. Dir: Md. Abd. Kadir. Chief Eng: N. S. A. Frigout. Press Officer: M. C. Yussof.
STATIONS (System: Marconi, Gates):

895 kc	335 m	10 kW:	07.45–11.00, 13.00–14.30	
970 –	309 –	1.2 – :	22.30–06.00, 10.00–14.30	
1100 –	272 –	10 – :	(from December 65)	
1240 –	242 –	20 – :	22.30–06.00, 10.00–14.30	
4865 –	61.66 –	10 – :	07.45–14.30.	

HOME SCE: Malay: 22.30–01.00, 04.30–06.00, 10.00–14.30 on 970/1240kc, 11.00–13.00 on 4865kc. N: 23.00, 05.00, 12.00 – English: 03.00–04.30 on 970/1240kc, 09.15–09.30 & 13.00–14.30 on 895/4865 kc. N: 04.15, 09.15(BBC), 13.15 – Chinese: 01.00–03.00 on 970/1240 kc, 09.30–11.00 on 895/4865kc. N: 02.45, 10.45 – Forces Prgr: 07.45–09.15, 11.00–13.00 on 895/4865kc.
ANN: E: "This is R. Brunei". Malay: "Inilah R. Brunei" – INT-SIG: Opens with the sound of Native Tune preceded by TS – V. by QSL-card or letter (for sw. only). Re. to Chief Eng. Recordings accepted.
PUB: "Suara Brunei" (Voice of Brunei) in English, Malay, Chinese.

BURMA

L.T: GMT+6½ h – Pr.L: Burmese, English.

BURMA BROADCASTING SERVICE (Gov.)

ADDR: Prome Rd, Kamayut P.O, Rangoon. Cable: Burbrocast. Te: 31355 – L.P: Dir: Major K. Sunn. Dir. Tec: U. Win Mg, M.I.R.E.
STATIONS (System RCA); (G.C: 96.05E/16.55N):

Call	kc	m	kW	Call	kc	m	kW
XZK	955[1]	314.0	50	XZK42	5040[1]	59.52	50
XZK8	1150[2]	261.0	5	XZK[3]	6035[1]	49.71	50
XZK2	4795[2]	62.57	50	XZK[4]	7120[1]	42.13	50

FM: 100/102/104/106Mc 0.25kW – [1] Prgr. I. [2] Prgr. II.
HOME SCE: Prgr. I: Burmese: 00.30–01.30 on 955/6035kc, 04.30–07.00 on 955/7120kc, 11.00–14.30 on 955/5040kc – N: 01.00, 06.30, 13.30 – Wrp: 13.28 – Folklore Music: Mon, Wed, Fri 13.45.
English: 01.30–02.30 on 955/6035kc, 07.00–07.30 on 955/7120kc, 14.30–16.00 on 955/5040kc – N: 02.00, 07.00, 14.45 – Mbg: Wed, Fri 14.30, Sat 07.10, Sun 02.10.
Prgr. II (Burmese): 11.00–14.45 on 1150/4795kc.
ANN: E: "This is the Burma Broadc. Service". Burmese: "Myanma Athan Hma Athan Hlwint Nay Barthe" – INT-SIG: Burmese Orchestral Music – V. by QSL-card. Rp. – ALF: K 9/- for 3 years.

CAMBODIA

L.T: GMT+7 h – Pr.L: Cambodian, French, English.

RADIODIFFUSION NATIONALE KHMERE (RNK-Gov.)

ADDR: 28 Ave Preah Mohaksatryany Kossomak, Phnom-Penh. Te: 3958. Cable: Miformation – L.P: Dir. Gen: D. Sidim. Dep. Dir: E. K. Srun. St. Mgr & Dir. Tec: E. Samrech.
STATIONS (G.C: 104.51E/11.34N):
1410kc 212.8m 120kW – 4907kc 61.14m 15kW – 9695kc 30.94m 50kW
1540kc 194.8m 20kW – 6090kc 49.26m 50kW
HOME SCE. (Nat Netw): On 1410/6090kc: 23.00–17.00. N: 23.00 (Sun 00.00), 05.00, 07.00, 12.00, 14.00.
INTERNATIONAL SCE: On 1540/4907kc(Netw I): 23.30–24.00, 05.30–06.00, 12.30–13.00, 14.00–14.30. N. in English: 23.45(Sun 00.45), 05.45, 12.45. N. in French: 23.30(Sun 00.30), 05.30, 12.30. Comm. in French: Mon, Wed, Fri 14.00–14.30.
On 9695kc(Netw II): 01.45–04.15, 12.00–14.40. N: English: 02.00, 03.45. French: 02.15, 03.30. Khmère: 01.45, 03.15. Thai: 04.00, 14.30. Chinese: 12.00, 12.30, 13.00. Laotian: 14.00. Vietnamese: 13.30.
ANN: F: "Ici Phnom-Penh, La Voix du Cambodge". E: "This is R. Phnomh-Penh, the Voice of Cambodia" – V. by letter – AD: 00.00–01.30 – ALF: 150 Riels.

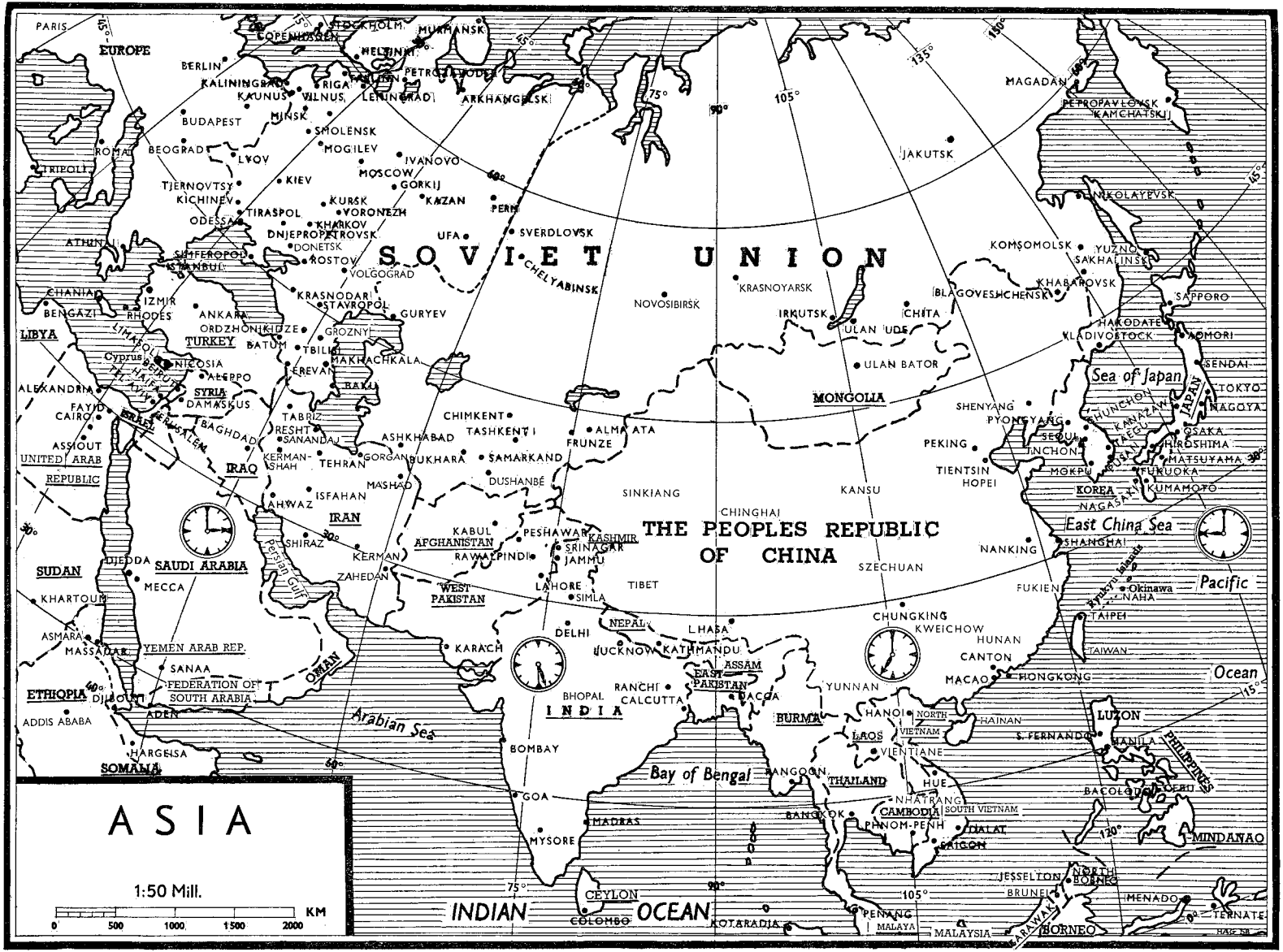
CEYLON

L.T: GMT+5½ h – Pr.L: English, Sinhalese, Tamil.

RADIO CEYLON (Gov. Comm.)

ADDR: Dept. of Broadc, P.O. Box 574, Colombo 7. Te: 91234. Cable: Radceylon – L.P: Dir. Gen: V. Panditha. Asst. Dir. Gen: L. S. Perera. Chief Eng: N. S. Wickremasinghe.
STATIONS (G.C: 79.54E/07.06N).

kc	m	kW	kc	m	kW	kc	m	kW
540	555.5	0.25	4968	60.38	10	7190	41.71	10
640	469.0	0.25	5020	59.76	10	9667	31.03	100
700	428.0	15	5075	59.13	10	9720	30.86	35
870	344.8	0.25	6005	49.96	10	11800	25.42	35
920	326.0	10	6075	49.38	10	15205	19.73	35
1030	294.0	20	6130	48.94	10	15330	19.57	100
4870	61.60	10	6185	48.50	10	17850	16.81	35
4900	61.22	10						


ASIA
1:50 Mill.
KM
0
500
1000
1500
2000
SOVIET UNION
THE PEOPLES REPUBLIC OF CHINA
INDIA
INDIAN OCEAN
Arabian Sea
Bay of Pacific
East China Sea
Sea of Japan
Persian Gulf
Bay of Bengal
EUROPE
TURKEY
IRAN
IRAQ
SAUDI ARABIA
SYRIA
LIBYA
SUDAN
ETHIOPIA
SOMALIA
MONGOLIA
KOREA
JAPAN
BURMA
THAILAND
PHILIPPINES
BORNEO
MALAYSIA
PARIS
STOCKHOLM
COPENHAGEN
HELSINKI
MURMANSK
BERLIN
KALININGRAD
RIGA
LENINGRAD
PETROGRADSK
ARKHANGELSK
KAUNUS
VILNUS
MINSK
SMOLENSK
BUDAPEST
BEOGRAD
ROMA
TRIPOLI
LVOV
MOGILEV
IVANOVO
MOSCOW
GORKIJ
KAZAN
PERM
TJERNOVTSY
KICHINEV
KIEV
KURSK
VORONEZH
ODESSA
TIRASPOL
KHARKOV
DNJEPROPETROVSK
DONETSK
UFA
SVERDLOVSK
ATHINAI
SIMFEROPOL
ISTANBUL
ROSTOV
VOLGOGRAD
CHANIA
IZMIR
BENGAZI
RHODES
ANKARA
KRASNODAR
STAVROPOL
GURYEV
ORDZHONIKIDZE
GROZNYI
BATUM
TBILISI
EREVAN
MAKHACHKALA
BAKU
LIMASSOL
BEIRUT
HAIFA
TEL AVIV
Cyprus
NICOSIA
ALEPPO
ALEXANDRIA
DAMASKUS
FAYID
CAIRO
ISRAEL
JERUSALEM
BAGHDAD
TABRIZ
RESHT
SANANDAJ
KERMANSHAH
TEHRAN
GORGAN
ASSIOUT
UNITED ARAB REPUBLIC
ASHKHABAD
CHIMKENT
TASHKENT
ALMA ATA
FRUNZE
BUKHARA
SAMARKAND
DUSHANBE
MASHAD
ISFAHAN
AHWAZ
SHIRAZ
KERMAN
ZAHEDAN
KABUL
AFGHANISTAN
PESHAWAR
RAWALPINDI
KASHMIR
SRINAGAR
JAMMU
LAHORE
SIMLA
TIBET
WEST PAKISTAN
DJEDDA
MECCA
KHARTOUM
ASMARA
MASSAWA
YEMEN ARAB REP.
SANAA
FEDERATION OF SOUTH ARABIA
ADEN
DJIBOUTI
ADDIS ABABA
HARGEISA
DELHI
KARACHI
LUCKNOW
KATHMANDU
NEPAL
LHASA
ASSAM
EAST PAKISTAN
DACCA
RANCHI
CALCUTTA
BHOPAL
BOMBAY
GOA
MADRAS
MYSORE
CEYLON
COLOMBO
KOTAARADJA
RANGOON
BANGKOK
CAMBODIA
PHNOM-PENH
SAIGON
HALAT
SOUTH VIETNAM
HUE
NHATRANG
VIENTIANE
LAOS
HANOI
NORTH VIETNAM
YUNNAN
KUNMING
CHUNGKING
KWEICHOW
HUNAN
CANTON
MACAO
HONGKONG
HAINAN
TAIWAN
FUKIEN
TAIPEI
Okinawa
NAHA
Ryukyu Islands
SHANGHAI
NANKING
SZECHUAN
KANSU
SINKIANG
CHINGHAI
PEKING
TIENTSIN
HOPEI
SHENYANG
PYONGYANG
SEOUL
INCHON
MOKPU
FUKUOKA
KUMAMOTO
NAGASAKI
OSAKA
NAGOYA
HIROSHIMA
MATSUYAMA
TOKYO
SENDAI
HAKODATE
AOMORI
SAPPORO
KOMSOMOLSK
YUZNO SAKHALINSK
KHABAROVSK
BLAGOVESHCHENSK
CHITA
ULAN UDE
ULAN BATOR
IRKUTSK
KRASNOYARSK
NOVOSIBIRSK
CHELYABINSK
JAKUTSK
MAGADAN
PETROPAVLOVSK KAMCHATSKIJ
NIKOLAYEVSK
LUZON
MANILA
S. FERNANDO
BACOLOD
CEBU
MINDANAO
JESSELTON
NORTH BORNEO
BRUNEI
MENADO
TERNATE
PENANG
MALAYA
SARAWAK
KUCHING
SINGAPORE
JAVA
SUMATRA
Hag 58

NATIONAL SERVICE
English: D 11.30–17.30 on 920/5020kc. Sun 04.30–07.30 on 920/6185kc – **N. Wrp:** W: 12.45, 15.30.
Sinhalese: D 01.00–03.00, 11.00(Sun 10.30)–17.00 on 700/4900kc, 06.30(Sun 03.00)–08.00 on 700/6075kc, N: 01.45, 07.15. **Sandya Sevaya:** 13.00–16.00 on 1030/5075kc.
Tamil: 01.15–03.00, 11.30–17.00 on 870/4968kc, 06.30(Sun 03.00)–08.00 on 870/6005kc.

COMMERCIAL SERVICE
To Ceylon in English, Sinhalese, Tamil:
Sinhalese: 01.30–03.00 on 640/4870kc, 03.00–07.30 on 640/6005kc, 07.30–10.30 on 920/6185kc (Sun on 640/6005kc), 10.30–11.30 on 920/5020kc. **N:** D: 01.45, 07.15 – **Tamil:** 04.30–05.30, 09.30–10.30 on 640/6005kc, 10.30–12.30 on 640/4870kc.
English: 01.30–03.00 on 920/5020kc, 03.00–04.30 on 920–6185kc, 07.30–09.30 on 640/6130kc (Sat/Sun 07.30–10.30 on 920/6185kc), 10.30–11.30 on 920/5020kc, 12.30–17.30 on 640/4870kc. N: D: 02.00, 07.45, 12.45.
To Asia in English, Hindi, Tamil:
English: 01.30–03.30(Sun 04.30) on 9667/15205kc, 12.30–16.45 on 9667kc – **N:** 02.00, 13.00(BBC).
Hindi, Tamil: 01.30–04.30(Sun 07.30) on 7190/9720/11800kc, 11.00 (Sun 10.30)–17.30 on 6075/9720/11800kc.

EXTERNAL SERVICES in English:
To Europe, No. Africa and M. East: 06.30–07.45 on 15330kc.
To So. Ea. Asia: 09.15–10.30 on 17850kc. **N. in English:** 07.20, 09.35.
ANN: E: "This is the Nat. Sce. of R. Ceylon"; "This is the Comm. Sce. of R. Ceylon"; This is the External Sce. of R. Ceylon broadc. to listeners in ——" – **INT-SIG:** Nat. Sce: Nat. Drums (Magul Bera) followed by Jaya Mangala Gatha. External Sce: Oriental folk theme "Gajaga Vannama" – V. by QSL-card or letter. Re. in E. to be addressed to Listener Research Officer. Recordings accepted – **PUB:** R. Times (fortnightly). **FI:** By state, licences, adv.

VOICE OF AMERICA RADIO STATION IN CEYLON

ADDR: Voice of America, Washington D.C. 20547, USA.
STATIONS: Colombo 35kW: (G.C: 79.59E/07.06N).
7110kc 42.19m – 7275kc 41.24m – 11835kc 25.35m – 15285kc 19.63m.
English: 01.00–03.30, 11.30–18.00. **Hindi:** 14.30–15.00, 15.30–16.00 **Urdu:** 15.00–15.30, 16.00–16.30. **Tamil:** 14.00–14.30.
ANN: "This is Colombo relaying Voice of America Programs" – **INT-SIG:** Variations of "Columbia the Gem of the Ocean" – V. by QSL-card.

CEYLON REDIFFUSION SERVICE LTD. (Gov. Comm.)

ADDR: P.O. Box 1002, Colombo. **Cable:** Rediffusion. Te: 7247 – **L.P:** Gen. Mgr: R. L. Kettle – Four prgr's (English, Hindi, Tamil, Telugu) via wired network.

CHINA (Peoples Rep. of)

L.T: GMT+8 h (Urumchi: GMT+6 h) – Pr.L: Chinese.

BROADCASTING ADMINISTRATION (Gov.)

ADDR: Broadc. Adm. Fu Hsin Men, Peking.

HOME SERVICE

CENTRAL PEOPLES BROADC. STATION:

Medium Waves:

kc	kc	kc	kc	kc	kc	kc	kc	kc	kc	kc	kc
540	610	690	760	820	910	1000	1050	1150	1250	1350	1470
560	630	710	780	830	960	1010	1070	1160	1280	1370	1480
570	640	720	790	850	970	1020	1090	1210	1290	1400	1500
590	660	730	810	890	980	1030	1140	1230	1330	1450	1510
600	680	750									

Short Waves:

kc	m	kc	m	kc	m	kc	m	kc	m
3225	93.05	6212	48.29	9020	33.26	11290	26.57	15300	19.61
3290	91.90	6225	48.19	9064	33.09	11330	26.47	15313	19.59
3390	88.50	6595	45.48	9170	32.70	11455	26.19	15445	19.43
3830	78.33	6790	44.18	9340	32.12	11515	26.05	15480	19.38
3860	77.44	6810	44.05	9570	31.35	11630	25.79	15550	19.29
3915	76.63	6890	43.54	9620	31.19	11660	25.73	15590	19.24
3985	75.28	6995	42.89	9670	31.02	11675	25.70	15610	19.22
4250	70.59	7065	42.46	9710	30.90	11690	25.66	15710	19.10
4460	67.26	7100	42.25	9717	30.88	11725	25.59	15880	18.89
4500	66.67	7170	41.84	9735	30.82	11860	25.30	17450	17.19
5075	59.13	7195	41.70	9765	30.72	11910	25.19	17490	17.15
5125	58.54	7240	41.44	9860	30.42	11925	25.16	17533	17.11
5320	56.39	7265	41.29	9920	30.24	11935	25.14	17605	17.04
5535	54.10	7305	41.07	9945	30.17	15030	19.96	17635	17.01
5915	50.72	7370	40.71	9972	30.08	15175	19.77	17780	16.87
6065	49.46	7500	40.00	10260	29.24	15240	19.69	17880	16.78
6100	49.18	7620	39.37	11100	27.03	15290	19.62	17900	16.76
6155	48.74								

D.PRGR'S: No information available.

LOCAL STATIONS

Name	kc	Name	kc
Peking	820, 1210, 1350, 1480	Chinghai	800, 1250, **6260, 6500, 9500**
Shanghai	850, 990, 1070, 1110, 1210, 1300, 1500	Singkiang	550, 740, 910, **4220, 4500, 4770, 6280, 7050, 7385, 9470, 10245**
Hopei	780, 850, 910, 1080, 1280, 1330, 1440, 1470	Shantung	920, 1110, 1450, **2350**
Tientsin	870, 950, 1070, 1390	Chekiang	800, 820, 960, 1350, 1370, **2475**
Inner Mongolia A	960, 1460, **3970, 4068, 6840, 6974, 9365, 9472, 11040**	Fukien	860, 880, 930, 950, 1210, 1250, 1430, 1560, **2340**
		Hunan	1260, **4990**
Inner Mongolia B	1070, 1360, **3900, 4000**	Canton	790, 890, 1400
		Kwangsi	620, 1320, 1330, 1390, 1410, 1450 **5010, 5920**
Bayinor	1270, **4000**		
Silingol	1310, **4525**	Kweichow	930, 1030, **3260**
Heilungkiang	270, 620, 1110, 1410, 1530	Szechuan	1220, **7225**
		Chungking	1080, 1310
Harbin	660, 970, 1400	Yunnan	820, 1380, **6937, 9990**
Shensi	900, 1350, **6176**		
Kansu	860, **6155, 7324**	Tibet	590, **4035, 5935, 9490**

FOREIGN SERVICE

Medium Waves: 1020kc 294m, 1040kc 289m, 1190kc 252m, 1300kc 231m, 1340kc 223.8m.

Short Waves:

kc	m	kc	m	kc	m	kc	m	kc	m
4020	74.63	6325	47.43	7350	40.82	9965	30.11	15140	19.82
4910	61.10	6345	47.28	7370	40.71	11445	26.21	15150	19.80
5075	59.11	6400	46.81	7450	40.27	11505	26.08	15190	19.75
5145	58.31	6825	43.96	7480	40.11	11650	25.75	15210	19.72
5860	51.20	6860	43.72	9457	31.73	11675	25.70	15220	19.71
5880	51.02	6890	43.54	9480	31.65	11685	25.67	15235	19.69
5915	50.71	6955	43.13	9490	31.61	11690	25.66	15250	19.67
5935	50.55	7035	42.64	9500	31.58	11715	25.61	15260	19.66
5950	50.42	7060	42.49	9510	31.55	11730	25.58	15270	19.65
5970	50.25	7065	42.46	9550	41.41	11740	25.55	15290	19.62
5985	50.13	7080	42.37	9555	31.40	11750	25.53	15345	19.55
5990	50.08	7095	42.28	9570	31.35	11780	25.47	15370	19.52
6000	50.00	7115	42.16	9585	31.30	11800	25.42	15417	19.46
6025	49.79	7125	42.11	9590	31.28	11820	25.38	15430	19.44
6035	49.71	7135	42.05	9595	31.37	11860	25.30	15500	19.35
6065	49.46	7150	41.96	9600	31.25	11885	25.24	15520	19.33
6080	49.34	7160	41.90	9650	31.09	11910	25.19	15670	19.15
6120	49.02	7180	41.78	9660	31.06	11945	25.12	17675	19.67
6125	48.98	7200	41.67	9665	31.04	11955	25.09	17680	16.97
6135	48.90	7205	41.64	9690	30.96	11965	25.07	17720	16.93
6145	48.82	7210	41.61	9755	30.76	11975	25.05	17730	16.92
6150	48.78	7230	41.49	9775	30.69	11980	25.04	17745	16.91
6155	48.74	7265	41.29	9785	30.66	12010	24.98	17765	16.89
6170	48.62	7270	41.27	9800	30.62	12055	24.88	17810	16.84
6180	48.54	7295	41.12	9860	30.43	15030	19.96	17835	16.82
6200	48.39	7300	41.09	9880	30.36	15060	19.92	17860	16.80
6210	48.31	7315	41.01	9900	30.30	15080	19.89	17885	16.78
6270	47.85	7325	40.96	9920	30.24	15095	19.87	17900	16.76
6290	47.70	7335	40.90	9945	30.17	15115	19.85		

D.PRGR'S: No information available.

ANN: E: "This is Radio Peking" – F: "Ici Radio Pekin" – G: "Hier ist Radio Peking" – P: "Aqui Pequim" – R: "Govorit Pekin" – Sp: "Aqui Pekin".
V. by QSL-card or letter. Recordings accepted.

CHINA (Rep. of) (Taiwan)

L.T: GMT+8 h (Su: GMT+9 h) – Pr.L: Chinese.

BROADCASTING CORPORATION OF CHINA

(Priv. enterprise under Gov. contract).
ADDR: Ren Ai Road, Taipei. Te: 72191. **Cable:** "Broadcast" – **L.P:** Man. Dir: Lee Shih-feng. Dir. Tec: K. S. Yeh.

STATIONS: Medium Waves:

Call	kc	kW	Call	kc	kW	Call	kc	kW
BED34	660	20	BED85	890	1	BED72	1120	0.5
BED58	720	10	BED55	960	20	BED86	1160	1
BED2	750	150	BED62	1000	50	BED89	1160	1
BED28	820	1	BED53	1020	3.5	BED32	1190	1
BED25	860	1	BED26	1040	1	BED50	1200	100
BED27	860	1	BED43	1060	1	BED88	1200	1
BED24	890	1	BED57	1070	10	BED79	1220	1

Call	kc	kW	Call	kc	kW	Call	kc	kW
BED47	1280	1	BED87	1390	1	BED82	1460	1
BED63	1350	1	BED54	1410	1	BED81	1470	1
BED23	1380	1	BED80	1410	1	BED83	1500	1
BED65	1380	1	BED48	1450	3.5	BED78	1540	1

Short Waves (G.C: 121.24E/25.09N):

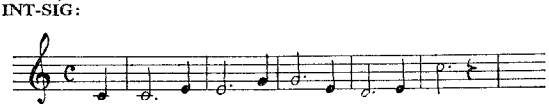
Call	kc	m	kW	Call	kc	m	kW
BED59	3215	93.31	3.5	BED91	9655	31.07	10
BED31	3230	92.88	1	BED75	11725	25.59	50
BED20	3335	89.96	10	BED69	11825	25.37	25
BED30	5980	50.17	3.5	BED45	11860	25.30	50
BED9	6040	49.67	7.5	BED44	11905	25.20	3
BED77	7110	42.19	1	BED37	11970	25.06	3
BED7	7130	42.08	50	BED60	15125	19.83	100
BED35	7150	41.96	3	BED36	15280	19.63	3
BED21	7250	41.38	10	BED38	15320	19.58	3
BED33	9630	31.15	3	BED49	15345	19.55	25
BED73	9685	30.98	25	BED39	17720	16.93	50
BED22	9690	30.96	10	BED95	17780	16.88	25
BED66	9765	30.72	50	BED40	17890	16.77	50

HOME SCE. in Chinese:
1st Net: 660kc 21.00–17.10 – **2nd Net:** 960kc 21.00–22.00, 00.00–02.00, 03.55–16.00 – **3rd Net:** 890kc 21.00–01.00, 04.00–15.00.

Schedule 6/11 66–4/3 67

English	kc	Thai	kc
02.50–03.50*	7130, 11825, 15125, 15345, 17720, 17780, 17890	12.30–13.00	7130, 9685, 11825, 17890
		Vietnamese	
11.00–11.30**	11825	12.00–12.30	7130, 9685, 11825, 17890
18.00–19.00***	9685, 9765, 11725, 11825, 15125, 17890	Chinese.	
		04.00–04.30 a	11825, 11860, 15345
French		04.30–05.00 b	7130, 11860, 15345
17.00–18.00	9685, 9765, 11725, 11825, 15125, 17890	05.00–06.00 c	7130, 9655, 11825, 11860, 15125, 15345, 17720, 17780
Indonesian			
04.00–04.30	7130, 9655, 15125, 17720	06.00–07.00 d	7130, 11825, 11860, 15345
11.30–12.00	7130, 9655, 9685, 17890	07.00–07.30 e	
		13.00–13.30 a	7130, 9685, 11825, 17890
Japanese			
06.00–06.30	15125, 17720, 17780	13.30–14.00 b	9685, 11825, 17890
10.00–10.30	7130, 9685, 11825, 11860	14.00–15.00 d	7130, 9685, 11825, 17890
		15.00–15.30 e	
Korean		15.30–16.30 c	7130, 9685, 9765, 11725, 11825, 15125, 17890
09.30–10.00	7130, 9685 11825, 11860		
23.30–24.00****	9685, 11825		

* to No. America/Japan/Australia/NZ – ** to Australia/NZ (Dragon Show) – *** to Africa & Middle East – **** relay of KBS for Vietnam – a = Amoy; b = Hakka; c = Mandarin; d = Cantonese; e = Chaochow.
NEWS: English 02.50, 03.20, 18.00, 18.30; French 17.00; Indonesian 04.07, 11.37; Japanese 06.10, 10.10; Korean 09.30; Thai 12.30; Vietnamese 12.00.
ANN: Home Sce: "This is BCC the 1st (2nd, 3rd...) net. (in Chinese)". For Overseas: E: "This is the Voice of Free China (a call of freedom in Asia)".
INT-SIG:



V. by letter or QSL-card. Re. in English & Chinese. Recordings accepted – **PUB:** Prgr.sched. free. **ALF:** NT $ 30.00

DEPARTMENT OF POSTS AND TELECOMMUNICATIONS

Ministry of Communications is a gov. authority responsible for determining power, frequency and supervising operations of all gov. & priv. radio & TV stations.
ADDR: No. 2, Sec. 1, Changsha Street, Taipei. **Te:** 23901–523. **L.P:** Dir: L. C. Fei.

CHENG SHENG BROADCASTING CORP. (Comm.)

ADDR: 433 Chungking North Rd, Sec. 3, Taipei. **Te:** 48281. **Cable:** CSBCOD – **L.P:** Pres: Y. Lee. Gen. Mgr: L. Lee. Dir. Tec: G. D. Tue. Dir. N: Y. Nieh.

Call	kc	kW	Call	kc	kW	Call	kc	kW
1) BEC34	820	1	3) BEV59	850	1	6) BEV60	1020	1
2) BEV35	1340	1	4) BEV36	1130	1	7) BEV37	1270	1
3) BEV58	1230	1	5) BEV72	930	1			

1) Cheng Sheng, The First Dept, Taipei – 2) Cheng Sheng, The Second Dept, Taipei – 3) BEV 58: The Farmers Broadc. St, First Dept, Taichung. BEV59: The Farmers Broadc, St. Second Dept, Taichung – 4) Yun Lin Broadc. St, Yun-Lin – 5) Kung Yi Broadc. St, Chiayi – 6) Cheng Yen Broadc. St, Kaohsiung – 7) Cheng Tung St. Taitung.
HOME SCE: 1) 21.00–18.00. **N:** Mandarin: Every h on the h – V. by letter. Recordings accepted.

CHINA YOUTH BROADCASTING STATION (Gov.)

ADDR: 131 Duen Huah Rd, Taipei.
STATIONS: BEG22 1150kc 3kW – BEG20 7180kc 41.78m 0.5kW.
HOME SCE. in Chinese: 21.00–01.00, 03.00–07.00, 09.30–15.30.
ANN: "This is the Voice of Youth" (in Chinese only) – V. by letter. Recordings accepted.

FU HSING BROADCASTING STATION (Gov.)

ADDR: P.O. Box 799. Taipei. **Te:** 942448 – **L.P:** Dir. Gen: C. Kung. Dir. Tec: L. L. Mou.
HOME SCE. in Mandarin: Taipei: 20.50–17.10 on 910/1090/1510kc (BEH 5/6/8), 20.50–17.10 on 790kc (BEH4) – **Taichung:** 20.50–02.05, 02.50–06.05, 08.20–17.05 on 590/910/1510kc (BEH 32/34/35) – **Kaohsiung:** 20.50–02.05, 02.55–06.05, 08.25–17.05 on 590/910/1090/1510kc (BEH42/43/44/45) – **Taitung:** 20.50–02.05, 02.50–06.00, 08.20–17.05 on 1090kc (BEH52) – **Hualien:** 20.50–02.05, 02.55–06.05, 08.25–17.05 on 1090kc (BEH56) – **Hsinchu:** 20.50–02.05, 02.50–06.05, 08.20–17.10 on 910/1090kc (BEH62/63) – **Ilan:** 20.50–02.05, 02.55–06.00, 08.25–17.00 on 910kc (BEH53). – **Sun-Moon-Lake:** 20.50–02.05, 02.55–06.00, 08.20–17.10 on 1090kc (BEH33).

POLICE BROADCASTING NETWORK (Gov.).

ADDR: No. 1, Tientsin Str, Taipei. **Te:** 24761 – **L.P:** Dir. Gen: C. Y. Tsuan. Dir. Tec: Hsu-Ming.
HOME SCE: W 21.15–07.00, 08.20–16.00. Sun 23.30–17.00.

	Call	kc	m	kW		Call	kc	m	kW
Taipei	BEP22	1260	238	10		Changwa BEP24	680	441.2	1.5
–	BEP23	5960	50.34	1		Kaohsiung			
Hsinchu	BEP26	1120	267.8	1.5		BEP25	1120	267.8	1.5

N: 22.00, 23.30, 00.30, 02.30, 03.30, 04.30, 05.30, 07.30, 08.00, 09.30, 11.30, 13.30, 14.30, 15.30, 15.50 – **ANN:** "This is Police Broadc. St" (in Chinese only) – V. by letter – **PUB:** Prgr. schedule free.

THE VOICE OF RIGHTEOUSNESS

ADDR: 210 Chi-San-Yen, Shih Lin, Taipei County, Taiwan – **L.P:** Dir. Gen: Wang Yi.
STATIONS (G.C: 121.31E/25.03N): BEC78 620kc 1kW.
BEC77 5995kc 50.04m 3kW – BEC76 7200kc 41.67m 10kW.
HOME SCE. in Chinese: 20.55–24.00, 11.00–17.40; Cantonese 11.00–12.00. Tibetan 14.30–15.00. Other times in Mandarin. **N:** 22.10, 22.50, 23.10, 12.00, 12.20, 12.40, 13.00, 13.20, 13.40, 14.15, 17.00 – V. by letter. Re. in Chinese or English.

MILITARY BROADCASTING STATIONS (Gov.)

ADDR: Military Broadc. Corps, Ministry of National Defense, Taipei. The Military Broadc. Corps and The Air Force Broadc. St. are two different organizations. The first belongs to the Political Dept. and Ministry of National Defense, the latter to Headquarters of Chinese Air Force. They are without any relationship in their adm. and service.
STATIONS:

Call	kc	m	kW	Call	kc	m	kW
1) BEC22	1100	272	1.5	4) BEC32	690	434.8	1.5
BEC23	1520	197.4	3	5) BEC33	1350	222.2	1.5
BEC24	**7280**	**41.21**	**1.5**	**BEC34**	**7270**	**41.27**	**1.5**
2) BEC25	700	428.6	3	6) BEC35	770	389	0.5
BEC26	**6090**	**49.26**	**3**	BEC36	1330	225.6	1.5
3) BEC27	1290	232	1.5	**BEC37**	**5985**	**50.13**	**1**
BEC28	**7240**	**41.44**	**1.5**	7) BEC38	840	357.1	0.3
4) BEC29	1250	240.0	1.5	BEC39	1490	201.34	3

1) No. 3 Section 1, Hsinyi Road, Taipei: 22.00–24.00, 03.00–07.00, 09.00–16.00 – V. by QSL-card – 2) Lanyealif, Shyhlin, Taipei: 22.00–03.00, 10.00–17.30 – 3) No. 3, Shyhfun Rd, Taichung: 22.00–03.00, 09.00–16.00 – 4) No. 101, Third Jengieng Rd, Kaohsiung – V. by QSL-card – 5) No. 38 Sanmin Str, Hualien: 22.00–24.00, 03.00–07.00, 09.00–17.00 – 6) No. 40, New Mingdertsuen, Tsoying: 22.00–24.00, 03.00–07.00, 09.00–17.00 – V. by QSL-card – 7) No. 14, Minsheng Rd Maagong, Penghwa.

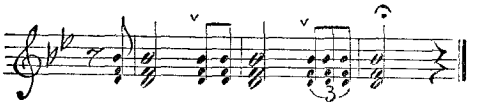
AIR FORCE BROADCASTING STATION (Military)

ADDR: 1st and 2nd Dept: 44 Section 2, Jen Ai Rd, Taipei. **Te:** 28981.
STATIONS (System: RCA):

BEC70	980kc 306.1m 3.5kW	BEC72	710kc 422.5m 1.5kW
BEC60	1440kc 208.3m 1 kW	BEC71	7260kc 41.32m 3.5kWd
BEC61	6105kc 49.14m 7.5kWd	BEC62	9745kc 30.76m 3.5kWd

HOME SCE. in Mandarin: Taipei (Main st.): 1st Dept: On 1440/7260kc: 21.00–01.05, 03.55–06.45, 09.55–17.00. **N:** 23.00, 05.00, 10.30, 12.00, 14.00. **English lessons:** 22.00. **English Songs:** 11.00 – 2nd Dept: On 980/6105kc: 20.55–01.05, 10.55–17.00. **N:** 22.00, 23.30, 11.00, 12.30. **Taichung:** On 1430/9745kc: 20.55–02.30, 08.55–17.10. **Tainan** (710kc): 21.20–00.35, 03.55–06.05, 09.55–16.35. **English lessons:** 23.00.

ANN: "Voice of Chinese Air Force" – INT-SIG: (2nd Dept.) Sign of Freedom – V. by QSL-card.



PUB: Prgr. schedule free on request.

ARMED FORCES RADIO TAIWAN (U.S. Armed Forces)
ADDR: Box 25, APO San Francisco 96263, Calif, USA. Te: 31375 or U.S. Military 4173 – L.P: Officer-in-charge: Lt. J. D. Jacobsen, USN. Dir. Prgr's: J. M. Brooks, DNC. Dir. Eng: R. W. Henning, DNC.
STATIONS (mw 5kW, sw+FM 1kW): 1560kc 192m – 100.1Mc 3990kc 75.19m – 7215kc 41.58m (G.C: 121.26E/25.06N).
Relay st's: Taichung 1580kc 1kW – Tainan 1590kc 1kW.
HOME SCE. in English: 24 h (exc. Sun 17.05–21.55) – N: every h on the h – ANN: "This is the Armed Forces Network Taiwan (Taipei, Tainan, Taichung)" – V. by QSL-card. Recordings accepted.

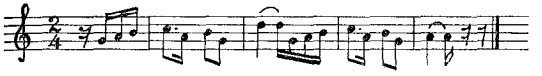
CYPRUS

L.T: GMT+2 h – Pr.L: Greek, English, Turkish.

CYPRUS BROADCASTING CORPORATION (Gov, Comm.)
ADDR: P.O. Box 1824, Nicosia. Cable: Broadcasts. Te: 5231 – L.P: Dir. Gen: V. I. Markides. Chief Eng: P. T. Astreos. Adm. Secr. & Public Rel. Officer: J. Hadjiossif.

STATIONS:	kc	m	kW		kc	m	kW
Nicosia	606	495	20	Paphos	915	328	2
Nicosia	692	434	20	Limassol	1484	202	0.5

HOME SCE: Greek: On 692/915/1485kc: W 04.00–12.00, 14.00–22.00, Sun 04.00–22.00 – N: 05.00, 11.30, 15.00, 17.30 – On 606kc: 19.00–22.00 (Sun also 06.00–10.00). Turkish on 606kc: 05.00–06.30, 10.00–11.30, 14.00–16.45. N: 05.30, 11.00, 16.15. English on 606kc: 11.30–12.30, 16.45–19.00. N: 12.00, 17.15 – ANN: Greek: "Radiofonikon Idryma Kyprou". Turkish: "Burasi Kibris Radyo Yayin Korporasyonu" – INT-SIG: Avkoritissa played on Guitar –



V. by letter. Recordings accepted – A.L.F: £ 1/5/0.
FI: Go. subsidized, Comm. adv. income – AD: 30 min d.

BRITISH FORCES BROADC. SCE. CYPRUS
is operated by the Ministry of Defence to provide at sce of inf, entertainment as well as a link with home for H.M. Forces in Cyprus. It is non-comm, does not accept adv – ADDR: B.F.P.O. 53, Cyprus – L.P: St. Contr: R. W. Morgan. Eng-in-Charge: M. E. Townley. Prgr. Org: T. J. Knowles.
STATIONS: Nicosia 1439kc 208m 1kW – Limassol 890kc 337m 7.5kW – Akrotiri 92.1Mc 20kW – Dhekelia 99.6Mc 20kW.
D. PRGRS: W 03.45–08.30, 10.30–21.09(Sat 22.09). Sun 05.30–21.00 – N: 04.00(W), 05.00(W), 07.00, 11.00(Sun), 13.00, 16.00, 17.00(Sat), 18.00, 21.00, 22.00(Sat) – Wrp: 03.58(W), 04.58(W), 07.10(Sun), 16.10 – Rlg: 04.10(W), 07.10(W), 06.30(Sun), 17.15(Sun).
ANN: "This is the British Forces Broadc. Sce. Cyprus" – V. by QSL-card. PUB: Prgr. sched. free. Rp.

BBC-EAST MEDITERRANEAN RELAY
STATIONS 7.5/20/100kW

kc	m	kc	m	kc	m	kc	m
638	470.5	6170	48.62	9625	31.17	15310	19,60
719	417.2	7140	42.02	9650	31.09	15330	19 57
1421	212,4	7230	41.49	9690	30.96	15420	19.46
6065	49.46	9530	31.48	11720	25.60	17885	16.78
6120	49.02	9600	31.25	11905	25.20		

Relays of the BBC's Arabic-, European,- World- and Overseas Sce's.

RELAY ARABIC SERVICE: 03.45–05.45, 11.00–21.00.
I=No. Egypt, Jordan, Lebanon, Syria; II=Libya, Tunisia; III=Iraq, Arabian, Peninsula; IV=Sudan, Ethiopia, Somalia, Aden, So. Egypt; All prgr's on mw's.

Times	Areas	kc	Times	Areas	kc
03.45–05.45	I	6120	11.00–15.45	III	7140, 11720
11.00–16.15	I	6120, 7140, 9650	15.45–16.00	III	7140
16.15–17.00	I	6120	16.00–16.15	III	6120, 7140
17.00–17.45	I	6120	16.15–18.00	III	6120
17.45–18.00	I	6120	18.00–21.00	III	6120, 7140
18.00–21.00	I	6120	03.45–05.45	IV	6120, 9650
03.45–05.45	II	6120	11.00–16.00	IV	9650
18.00–21.00	II	6120	16.00–21.00	IV	6120, 9650
03.45–05.45	III	6120, 7140			

RELAY EUROPEAN SERVICE

Czech	kc	German	kc
05.15–05.30	9625, 7230	04.30–05.15	7230, 9625
		05.45–06.15	9625
English		19.00–21.00	7230, 9600
04.00–04.30	9625	Hungarian	
06.00–06.30	11905	05.30–05.45	9625
07.00–07.15	11905	06.30–06.45	9625
21.00–21.15	7230, 9530, 9600	22.00–22.15	7230
English by Radio		Polish	
05.30–05.45	7230	04.15–04.30	7230
06.45–07.00	11905	06.15–06.30	9625
18.30–18.45	7230, 9600	21.15–22.00	7230
19.30–20.00	6170, 9530	Russian	
		03.45–04.00	9625
French		17.00–18.00	9690, 7140
06.30–06.45	11905	20.00–21.00	9530

RELAY WORLD SERVICE
V=Far East, No. We. Pacific; VI=So. & So. East Asia/Indonesia; VII=Ce. & So. Africa; VIII=Mid East; IX=Ea. Africa.

Times	Area	kc	Times	Area	kc
23.00–23.15	V	7140, 9625	03.00–03.45	VIII	6120, 7140,
09.00–11.30	V	21660			9625
11.30–13.30	V	15260	03.00–04.15	VIII	7230
23.00–23.15	VI	7140, 9625	05.45–08.00	VIII	6120, 7140,
00.00–00.30	VI	7140, 9625			9650
01.45–02.15	VI	7140, 9625	06.00–08.00	VIII	11720
16.00–18.15	VI	9625	16.00–18.15	VIII	9625
04.00–05.45	VII	11905	03.00–03.30	IX	9650
05.00–08.00	VII	15420	03.00–05.45	IX	11905
06.00–08.00	VII	17885	05.00–06.00	IX	15420
09.00–17.45	VII	17885	06.00–08.00	IX	15420,17885
11.00–14.15	VII	15420	09.00–17.45	IX	17885
18.00–18.15	VII	11820,15420	11.00–14.15	IX	15420
03.00–03.30	VIII	9650	18.00–18.15	IX	11820,15420

RELAY OTHER OVERSEAS SERVICES
English (to Ea. & Ce. Africa): 04.45–05.00, 10.15–11.00, 16.15–16.30, 17.00–17.45 on 15420kc; 18.15–19.15 on 11820/15420kc.
In other languages: To Africa: 03.30–03.45 on 9650kc; 10.00–10.15, 14.15–15.00, 15.45–16.15, 16.30–17.00, 17.45–18.00 on 15420kc. To Asia: 22.00–22.45 on 6065/7140/9625kc; 22.45–23.00, 23.30–24.00, 01.30–01.45 on 7140/9625kc; 09.30–13.00 on 15310kc; 13.00–14.15 on 15330kc; 14.15–15.45 on 9690/15330kc; 15.45–16.15 on 9690kc; 16.15–17.00 on 7140/9690kc.
Medium Waves (relay Arabic Sce): On 638/719kc: 03.00–03.45, 05.45–08.00. On 1421kc: 03.00–06.30, 10.30–21.15.

Listen to

Voice of Free China

International Service
BROADCASTING CORPORATION OF CHINA
Taipei, Taiwan, Republic of China
for
fast and comprehensive coverage
of
THE FAR EAST

FREQUENCIES:

7130-Kc	11860-Kc
9655-Kc	15125-Kc
9685-Kc	15345-Kc
9765-Kc	17720-Kc
11725-Kc	17780-Kc
11825-Kc	17890-Kc

HONG KONG (British)

L.T: GMT+8 h (Apr–Oct +9 h) – **Pr.L:** Chinese.

RADIO HONG KONG (Gov.)

ADDR: P.O. Box 200, Hong Kong. **Cable:** Broadcasts. **Te:** 226822 – **L.P:** Dir. of Broadc: D. E. Brooks. Chief Eng: R. Winyard. Head, Chinese Sce: N. Y. Chow. Head, English Sce: T. A. Birch.

STATIONS: [1] Chinese Sce. [2] English Sce.

[1] 640kc 468.7m 2kW – [1] 3940kc 76.14m 2.5kW –
[2] 860kc 348.8m 2kW – [2] 91Mc 50kW – [1] 94Mc 50kW.

HOME SCE: English: 23.00–16.00 – **N:** 00.00, 05.15, 11.00(BBC Newsreel), 15.00 – **Wrp:** 23.58, 10.58, 13.13, 14.58. **Chinese:** 23.00–16.00 – **N:** 00.00, 05.30, 10.00, 12.00*, 12.30 – **Wrp:** 23.58, 05.28, 11.58, 15.30 – *Rel. Far Eastern St. from London.

ANN: English: "This is R. Hong Kong". Chinese: "Ni do hai Heung Kong Kwong bor deen toy" – V. by QSL-card. Recordings accepted – **ALF:** HK $ 20,-.

HONG KONG COMMERCIAL BROADCASTING CO.

ADDR: P.O. Box 3000, Hong Kong. **Te:** 236223. **Cable:** Radioads – **L.P:** Man. Dir: G. Ho. Dir. Tec: W. S. Ip.

STATIONS (System: AWA, Can. G.E):
1050kc 2kW: Cantonese – 1170kc 2kW: Cantonese.
1530kc 2kW: English.

HOME SCE. on all freq's: 23.00–16.00.

English: N: 00.00, 05.15, 10.00, 11.00, 12.00, 13.00, 14.00, 15.00 (Newsreel), 16.00 – **Wrp:** 00.10, 05.30, 08.30, 10.10, 12.15, 14.15, 16.00 – **Cantonese: Wrp:** 23.45, 00.00, 05.28, 12.30(Sun), 13.30(W), 15.00 – **L.L:** (English): W 23.30–23.45 – **ANN:** E: "Commercial Radio Hong Kong" – **INT-SIG:** Chimes – V. by letter. Recordings accepted.

REDIFFUSION (HONG KONG) LTD. A subsidiary of Redif. Ltd, London (Comm.) – **ADDR:** P.O. Box 121, Hong Kong. **Cable:** Rediffuse. **Te:** 72–2211 – **L.P:** Gen. Mgr: R. J. Warren. Comm. Mgr: J. Sloan. Chief Eng: A. T. B. Bardens A.M.I.E.E, M. Brit. IRE. Dir. in charge (Chinese prgr): C. W. Man – 4 simultaneous wired broadc. netw's – Originating own prgr's, also relay R. Hong Kong, BBC, etc: D 22.00–15.00.

INDIA

L.T: GMT+5½ h – **Pr.L:** Hindi, Marathi, Oriya, Bengali, Assamese, Tamil, Telugu, Urdu, Kannada, Kashmiri, Sanskrit, Dogri, Sindhi, Punjabi, Malayalam, English.

ALL INDIA RADIO (Gov.)

ADDR: Directorate General, Akashvani Bhavan, Parliament Str, New Delhi 1. **Te:** 30101. **Cable:** Airgeneral. **L.P:** Dir. Gen: Dr. V. K. Narayana Menon. Dep. Dir. Gen(Prgr): K. S. Mullick. Dir. Prgr: B. S. Anand. Dep. Dir. Gen(Adm): S. Parmesshwaran. Dep. Dir. Gen(Inspection): A. K. Sen. Chief Eng: S. S. Aiyar. Dir. News Sce: Brig. R. Streenivasan. Dir. External Sce: Shri K. P. Shungloo. Dir. Staff Training: R. Chander.

STATIONS: Medium Waves:

North Regional	kc	m		kc	m
Delhi A	810	370.4	Tiruchi B	1480	202.7
Delhi B	1070	280.4	Tirunelveli	1200	250.0
Delhi C	1370	219.0	Vijayawada A	840	357.1
Delhi D	1570	191.1	Vijayawada B	1500	200.0
Lucknow A	760	394.7	Trivandrum A	660	454.5
Lucknow B	1320	227.3	Trivandrum B	1140	263.2
Allahabad	950	315.8	Calicut A	680	411.2
Allahabad B	1420	211.3	Calicut B	1090	275.0
Jabalpur	1180	253.0	Trichur	580	517.2
Patna A	620	483.9	Hyderabad A	740	405.4
Patna B	1500	200.0	Hyderabad C	1220	245.9
Jullundur	710	422.5	Bangalore A	610	491.8
Jaipur A	1480	202.7	Bangalore B	820	365.9
Jaipur B	1270	236.2	Dhawar A	1360	220.6
Jodhpur	820	365.9	Dhawar B	1160	258.6
Ajmer	600	500.0	Vishakhapatham	930	322.6
Indore A	650	461.5	Cuddapah	900	333.3
Indore B	1590	188.7	Bhadrawathi	800	375.0
Bhopal A	1520	197.4	**West Regional**		
Bhopal B	1200	250.0	Bombay A	1040	288.5
Chandigarh	1220	246.0	Bombay B	550	545.5
Ranchi	560	535.7	Bombay C	1230	243.9
Varanasi	1240	241.9	Nagpur A	670	447.8
Bikaner	1330	225.6	Nagpur B	1000	300.0
Kanpur	1440	206.9	Ahmedabad A	850	352.9
Raipur	980	306.1	Ahmedabad B	1400	214.3
Gwalior	1390	215.8	Baroda	850	352.9
Rampur	1020	294.1	Poona A	780	384.6
South Regional			Poona B	970	309.5
Madras A	720	416.7	Rajkot A	910	329.7
Madras B	1420	211.3	Rajkot B	1420	211.3
Madras C	1550	193.5	Panjim (Goa)	880	340.9
Tiruchi A	940	319.1	Sangli	1250	240.0
Bhuj	1290	232.6	Kohima	1490	201.3
East Regional			Sambalpur	860	348.8
Calcutta A	590	508.5	Siliguri	1560	192.3
Calcutta B	1130	265.5	Port Blair	1440	208.3
Calcutta C	1540	194.8	Imphal	1390	215.8
Cuttack A	965	310.9	Jeypore	1460	205.5
Cuttack B	1350	222.2	Shillong	1200	250.0
Gauhati A	730	411.0	Pasighat	1060	283.0
Gauhati B	1030	291.3			

Short Wawes: Delhi VUD: 10/20/50/100kW (G.C: 77.12E/28.43N)

kc	m	kc	m	kc	m	kc	m	kc	m
3295	91.05	7125	42.11	9705	30.91	11850	25.32	15210	19.72
3365	89.15	7135	42.05	9730	30.83	11855	25.31	15230	19.69
3905	76.82	7165	41.87	9740	30.80	11865	25.28	15290	19.62
3925	76.43	7195	41.70	9765	30.72	11895	25.22	15310	19.60
4760	63.03	7215	41.58	9910	30.26	11905	25.20	15430	19.44
4960	60.48	7225	41.52	10335	29.03	11910	25.19	17705	16.94
4990	60.12	7235	41.47	11710	25.62	11920	25.17	17715	16.93
5955	50.38	7255	41.35	11715	25.61	11930	25.15	17720	16.93
6040	49.67	7285	41.18	11730	25.58	15105	19.86	17735	16.92
6050	49.59	7290	41.15	11740	25.55	15135	19.82	17750	16.90
6065	49.46	9535	31.46	11755	25.52	15155	19.80	17760	16.89
6140	48.86	9575	31.33	11770	25.49	15160	19.79	17815	16.84
6170	48.62	9600	31.25	11785	25.46	15165	19.78	17830	16.83
6180	48.54	9605	31.23	11810	25.40	15180	19.76	17855	16.80
6190	48.78	9615	31.20	11830	25.36	15185	19.76	21580	13.90
7105	42.22	9630	31.15	11840	25.34	15190	19.75	21615	13.88
7120	42.11	9690	30.96	11845	25.33				

Lucknow (No. Reg. Sce) 10 kW: 3205kc 93.60m – 4880kc 61.48m – 7250kc 41.38m. **Simla** (No. Reg. Sce) 2.5kW: 3223kc 93.09m. **Bhopal** (No. Reg. Sce) 10kW 3315kc 90.50m – 5990kc 50.08m – 7180kc 41.78m. **Madras** (So. Reg. Sce) VUM: 4920kc 60.98m – 7160kc 41.90m. **Hyderabad** (So. Reg. Sce) 10kW: 3355kc 89.42m – 4800kc 62.50m – 6120kc 49.02m – 7140kc 42.02m. **Bombay** (West Reg. Sce) VUB: 3295kc 91.05m – 4840kc 61.98m – 6150kc 48.78m – 7240kc 41.44m. **Calcutta** (Ea. Reg. Sce) VUC: 3305kc 90.77m – 4820kc 62.24m – 6010kc 49.92m – 7210kc 41.61m. **Gauhati** (Ea. Reg. Sce) 10kW: 3235kc 92.74m – 3375kc 88.89m – 4775kc 62.84m – 4940kc 60.73m – 5970kc 50.25m – 6130kc 48 94m – 7280kc 41.21m. **Kurseong** (Ea. Reg. Sce) 3355kc 89.42m – 4895kc 61.29m – 7230kc 41.49m. **Kohima** (Ea. Reg. Sce) 10kW: 3268kc 91.78m – 4850kc 61.86m – 6065kc 49.46m – 7170kc 41.84m.

HOME SERVICES

NORTH REG. SCE:

Delhi A: 00.30–18.30 on 810/3365/4960/6190/7290kc (sw's variable) – **Delhi B:** 02.30–03.30, 07.30–09.00 on 1070kc. 12.25–17.30 on 1070/3365/3905/5995kc (sw's variable) – **Delhi C:** 14.15–14.45 on 1370/3905kc – **Delhi D:** 12.25–17.30 on 1570/3365/4760kc (sw's variable) – **Lucknow:** 01.00–04.00, 07.00–10.00, 11.45–17.30 on 760/1320/3205/4880/7250kc (sw's variable) – **Simla:** 01.00–03.00, 12.30–16.30 on 3223kc – **Bhopal:** 01.00–03.50, 07.00–08.50, 12.30–17.15 on 1520/3315/7180kc (sw's variable).

SOUTH REG. SCE:

Madras A: 00.30–05.30, 07.00–08.40, 12.00–17.30 on 720/4920/7260kc (sw's variable) – **Madras B:** 00.30–02.45, 06.25–08.30, 12.00–17.10 on 1420/4920kc (sw variable) – **Hyderabad:** 00.30–03.30, 07.00–09.20, 12.00–17.15 on 740/3355/4800kc (sw's variable).

WEST REG. SCE:

Bombay A: 01.30–03.30, 06.30–10.00, 12.30–18.00 on 1040kc – **Bombay B:** 00.30–17.30 on 550/3295/4840/6150/7120kc (sw's variable).

EAST REG. SCE:

Calcutta A: 00.30–17.30 on 670/3305/4820/7210kc (sw's variable) – **Calcutta B:** 01.00–03.30, 07.00–08.50, 11.30–17.10 on 1130kc – **Gauhati A:** 00.30–03.30, 07.00–08.30, 10.30–17.10 on 730/3375/4940/7280kc (sw's variable) – **Gauhati B+C:** 01.00–01.45, 02.00–03.30, 05.20–07.00, 07.30–10.05, 10.30–12.30, 12.45–16.30 on 1030/3235/4775/6130/7150kc (sw's variable) – **Kurseong:** 01.25–04.00 on 4895kc, 05.20–09.30 on 7230kc, 11.30–17.10 on 3355kc – **Kohima:** 01.00–04.45, 07.30–08.30, 10.30–16.00 on 1490/4850/6065/7170kc (sw's variable).

HOME NEWS in English (on shortwaves):

01.10–01.15: On 3365, 3905, 4760, 6040, 7105, 7125, 11810kc (Delhi). **02.30–02.45:** On 3905, 4760, 5990, 7105, 9730, 11710, 11895, 15310, 17830kc (Delhi), 3223 (Simla), 3315 (Bhopal), 4920 (Madras), 6120 (Hyderabad), 4940 (Gauhati), 3345 (Jammu), 3277kc (Srinagar), 4850kc (Kohima). **08.00–08.10:** On 6190, 7290, 9600, 9705, 11715, 11850, 15105, 17890kc (Delhi), 7160kc (Madras), 7160kc (Hyderabad), 6065kc (Kohima).

15.30–15.45: On 3295, 3925, 4760, 4962, 5995, 6140, 7265, 9615, 10335kc (Delhi), 3223 (Simla), 3315 (Bhopal), 4920 (Madras), 4800 (Hyderabad), 3235 (Gauhati), 3345 (Jammu), 3277 (Srinagar), 3355kc (Kurseong), 4850kc (Kohima).

17.00–17.05 (Sat 17.30–17.35): On 3365, 3925, 4760, 6140, 7265, 9615, 10335kc (Delhi).

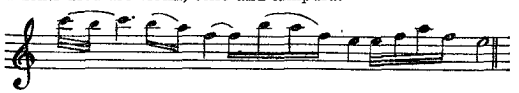
ALL INDIA VARIETY PRGR. (Vividh Bharati): Short Wave Sce: 01.30–04.00 on 6035/6085kc, 04.45–07.00 on 9510kc, 08.30–10.15 on

9575/9600kc, 10.30–12.00 on 9615kc, 10.30–11.00 on 9575kc, 13.00–17.10(Sat 17.40) on 6085/9575kc, 13.00–17.00(Sat 17.30) on 6085/9575kc.
URDU PRGR: 03.00–05.00 on 7290kc, 08.30–11.30 on 9690kc, 15.00–21.00 on 710/3365kc.

EXTERNAL SERVICES

GENERAL SERVICE (for Indians Overseas):			
So. East Asia	**L**	**kc**	**N**
23.15–00.15	Hindi	7235	23.20–23.30
00.15–01.00	Tamil	11810	00.20–00.30
11.30–12.30	Tamil	15380	
Ea. Africa			
03.30–04.15	Hindi	15130	03.35–03.45
04.15–04.30	Gujarati	15130	04.15–04.30
04.30–04.40	Konkani	15130	04.30–04.40
15.45–15.15	Swahili	11840/15105	15.45–15.55
16.15–17.00	Hindi	15270	16.20–16.30
17.00–17.45	Gujarati	15270	17.00–17.10
EASTERN SERVICE			
Nepal			
01.30–02.15	Nepali	6050/7225/9630	02.00–02.10
06.30–07.00	Nepali	7120/9600/11715	06.30–06.40
Burma			
00.40–01.15	Burmese	9765/11785	00.41–00.50
11.15–12.15	Burmese	15105/17750	11.16–11.25
Thailand			
11.40–12.00	Thai	17705/21580	11.45–11.55
China			
11.45–12.30	Cantonese	11830/15160	11.46–11.55
12.30–13.15	Kuoyu	11830/15160	12.31–12.40
Bhutan, Sikkim			
03.15–03.30	Tibetan	9705/11920	03.16–03.21
12.30–13.15	Tibetan	7290/9705	12.45–12.55
Indonesia			
08.45–09.45	Indonesian	15290/17715	08.46–08.55
East Asia			
11.15–11.30	French	17705/21580	11.16–11.25
WESTERN SERVICE			
Afghanistan			
02.45–03.00	Pushtu	7195/9630	02.50–03.00
14.45–15.30	Pushtu	3905	14.50–15.00
07.00–07.30	Pushtu	9575/11810	07.05–07.10
07.30–08.00	Afghan/Persian	9575/11810	07.35–07.45
Iran			
03.45–04.00	Persian	15190/17830	03.50–04.00
16.15–17.15	Persian	5955/7135	16.16–16.26
West Asia			
05.00–05.30	Arabic	15210/17705	05.05–05.15
17.30–18.30	Arabic	3905/7290/9910	17.45–17.55
18.45–19.30	French	7255/9910	18.50–19.00
SOUTHERN SERVICE			
Ceylon			
12.45–13.15	Sinhala	15430/17815	12.50–12.57
	GENERAL OVERSEAS SERVICE		
South East Asia			
22.45–01.15	English	3905/6180/9740/11710	23.00–23.10 01.00–01.05
13.30–15.00	English	11810/15230	13.30–13.40 14.55–15.00
North East Asia			
22.45–01.15	English	9615/11760	23.00–23.10 01.00–01.05
10.00–11.00	English	15105/17855/21615	10.00–10.10
Australia & New Zealand			
10.00–11.00	English	11710/15165	10.00–10.10
20.45–22.30	English	9910/11930	21.00–21.05 22.00–22.10
Africa			
17.45–20.45	English	9690/15270/11740	18.00–18.10 19.00–19.05
Europe			
17.45–22.30	English	7215/9910/11905	20.00–20.10 21.00–21.05 22.00–22.10

There will be changes in frequencies from time to time and listeners are advised to listen to announcements which will cover all such changes.
ANN: Home Sce: "This is All India Radio". External Sce: "This is Delhi calling in the External Services of All India Radio".
INT-SIG: All India Radio's signature is a melody of eight second's duration repeated with intervals of 10 seconds in between. The Instruments used are violin, cello and tampura.



Advertisement

ALL INDIA RADIO
BROADCASTS
IN
20 LANGUAGES
ROUND THE CLOCK
TO

EUROPE, AFRICA, ASIA, AUSTRALIA & NEW ZEALAND

News, Talks, Commentaries, Music, Plays, Features & other Programmes of interest to listeners

PROGRAMME SCHEDULES ARE AVAILABLE ON REQUEST FROM

THE DIRECTOR OF EXTERNAL SERVICES

ALL INDIA RADIO

POST BOX 500
NEW DELHI (INDIA)

V. by QSL-card – PUB: "India Calling" free of charge – prgr.journal in English. Requests for free supply of copies may be made either to the Dir. of External Services of All India Radio, New Delhi or through the Indian Diplomatic Mission concerned.

RADIO KASHMIR

Srinagar A: 1120kc 267.9m 01.30–17.35; Jammu: 01.00–04.00, 05.20–09.30, 11.30–17.35 on 990/3345/4950/5960kc (sw's variable).

INDONESIA

L.T: See Time Table – Pr.L: Indonesian.

RADIO REPUBLIK INDONESIA (Gov.)

ADDR: P.O. Box 157, Djakarta. Te: Otomaat 49091. Cable: RRI – L.P: Dir. Gen: L. Soetan Toenaro. Vice Dir. Gen. Tec. Sce's: Sunarjo Dir. Public Relations: M. Rais Baheramsjah.

HOME SERVICES

Call	kc	m	kW
Djakarta*	(Central station)		
–	2312	129.3	2
–	2460	121.9	2
YDB2	3277	91.55	7.5
	4805	62.43	50
YDR	6045	49.63	100
	6105	49.14	1
	9770	30.71	20
	11770	25.49	20
YDC	15150	19.80	7.5
Bandung (W. Java)			
YDA2	2421	123.9	0.25
YDA3	4942	60.72	10
YDA	3205	93.60	10
Tjirebon (W. Java)			
YDA6	2390	125.5	1
Purwokerto (C. Java)			
–	2485	120.7	–
–	3395	88.37	0.1
–	3440	87.21	0.3
Jogjakarta (C. Java)			
YDJ3	2350	127.6	1
YDJ	5047	59.43	20
YDJ2	7100	42.25	7.5
Surakarta (C. Java)			
YDG3	4875	61.35	10
	4875	61.35	0.6
	2450	122.5	
Semarang (C. Java)			
YDH	2490	120.5	0.4
YDH2	3935	76.25	5
Madiun (C. Java)			
YDG6	3286	91.26	1
Surabaja (E. Java)			
YDJ3	2370	126.6	1
YDI	3975	75.47	10
Djember (E. Java)			
YDI6	3315	90.50	1
YDI6	3975	75.47	1
Sumenep (E. Java)			
YDI20	3355	84.42	1
Kotaradja (Banda Atjeh) (N. Sumatra)			
YDN	2390	125.5	1
Medan (N. Sumatra)			
YDD2	3395	88.37	1
YDP4	5030	59.64	20
YDP3	7240	41.44	7.5
Silbolga			
YDM7	3241	92.56	1
Pakanbaru (C. Sumatra)			
	3465	86.58	1
	5955	50.38	5
Djambi (E. Sumatra)			
YDK6	2490	120.5	0.3
	3375	88.89	1
	4775	62.84	7.5
Padang (W. Sumatra)			
YDL	2480	120.9	1
YDL2	3960	75.76	10
	6170	48.62	10
Bukittinggi (W. Sumatra)			
YDM4	3305	90.77	0.3
YDM2	4910	61.10	1

Call	kc	m	kW
Palembang (S. Sumatra)			
YDK	4855	61.79	10
–	2430	123.5	1
Tadjung Pinang			
–	4930	60.85	0.15
–	6980	42.98	1
Pontianak (W. Kalimantan)			
YFW2	2350	127.6	1
	3345	89.68	5
Bandjarmasin (S. Kalimantan)			
YDO	3250	92.31	1
–	4820	62.24	1
YDO2	5970	50.25	3
Samarinda (E. Kalimantan)			
–	4890	61.35	1
–	9104	32.95	7.5
Palangkaraja (C. Kalimantan)			
YDZ7	3325	90.23	1
Makasar (Sulawesi)			
YDQ	2490	120.5	0.3
–	4753	63.12	20
–	9550	31.41	7.5
YDQ2	11750	25.53	1.5
Menado (Sulawesi)			
YDS2	5990	50.08	10
–	7295	41.12	1
Gorontalo			
–	4900	61.22	1
Denpasar			
YDU2	3945	70.04	1
–	7118	42.14	10
Singaradja			
YDU7	2420	124.0	0.25
Mataram			
YDF5	3223	93.09	1
Kupang			
YDV	3259	92.05	5
–	3385	88.63	5
Ambon			
YDR3	3241	92.50	10
YDR	4865	61.66	10
YDR2	7140	42.02	1
Sukarnopura			
8FW32	6070	49.42	0.5
8FW34	3325	90.23	10
–	5045	59.46	0.5
8FW33	7190	41.72	10
8FW30	9745	30.78	5
8FW2	15344	19.55	5
Ternate			
–	3915	76.64	1
Sorong			
8FW20	3395	88.37	0.5
–	4872	61.58	5
Fak Fak			
–	4805	62.43	0.5
8FW40	3345	89.68	–
–	4810	62.16	–
Manokwari			
–	4765	62.95	1
8FW5	3365	89.15	0.25
Biak			
8FW50	3385	88.63	0.5
–	7165	41.87	0.5
Merauke			
8FW6	3985	75.28	0.25

National Prgr. (Djakarta): 22.30(Sun 23.30)–07.30, 09.30–16.30 on 6045/7270/11770/15150kc.

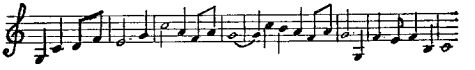
N: W 22.30, 23.30, 04.30, 05.30, 11.30, 12.30, 14.30. Sun 23.30, 00.30 04.30, 05.30, 11.30, 12.30, 14.30.

Local Prgr. (Djakarta): 09.30–11.30 on 2460kc.

Third Prgr. (Djakarta): 22.28–23.30 (Sun 23.28–02.30) on 3277/4805kc, 09.30–15.30 on 3277/4805kc.

ANN: Nat. Prgr: Indonesian: "Inilah R. Republik Indonesia di... (name of the station)".

INT-SIG: Nat. Prgr: Balinese theme composed by Iskandar.



played on Hammond organ by Sudarnoto. V. by QSL-card or letter.

FOREIGN SERVICE

STATIONS: Djakarta (G.C: 106.50E/06.12S): 20/50kW YDF6 9865kc 30.40m 50kW – YDF 11770kc 25.49m 20kW – YDF2 11715kc 25.61m 50kW. I=Australia/NZ/Pacific; II=So. Ea. Asia; III=Ea. Asia; IV=So. Asia; V=Japan; VI=USA (West Coast); VII=Africa; VIII=Europe; IX=Mid. East; X=Malaysia.

Times	Areas	kc
Arabic		
13.00–14.00	II	9865
16.15–17.00	II	9865
Chinese		
00.00–00.30	X	9865
12.00–13.00	II/III	9865
English		
00.30–01.00	X	9865
11.00–12.00	I	9865
14.30–15.30	II/IV/V/VI	9865
19.00–20.00	VIII/I	9865
French		
17.00–18.00*	VIII	9865

Times	Areas	kc
17.00–18.00*	VII/IX	9865
17.30–18.00**	VIII/VII/IX	9865
German		
17.00–17.30**	VIII	9865
Hindi		
15.30–16.00	IV/II	9865
Indonesian		
18.00–19.00	VIII/IX	9865
01.00–02.30	VI/II	9865
Malay		
23.30–24.00	X	9865
08.00–09.30	X	11770

*=D.exc. Tues & Fri. **=Tues & Fri only.

Note: This schedule is changed every 3 months according to tentative high freq. broadc. sched.

English: N: 11.15, 14.45, 19.15 – French: N: 17.41 – Indonesian: N: 18.15, 18.55, 01.15, 01.55.

ANN: E: "This is the Voice of Indonesia broadcasting from Djakarta". F: "Ici Djakarta, la voix de l'Indonésie".

INT-SIG: Some instrumental music in accordance with the genre of the next prgr – V. by QSL-card or letter. Listeners rep.s are welcome.

PUB: Weekly: "Mingguan Radio" (home prgr) – Monthly: "Voice of Indonesia" (Foreign broadc. in Indonesian, Hindi, Urdu, Chinese, Arabic, English, French, German). Write to "Voice of Indonesia", RRI. P.O. Box 157, Djakarta.

IRAN

L.T: GMT+3½ h – Pr.L: Farsi.

MINISTRY OF INFORMATION (Gov.)

ADDR: Ministry of Information, Meidan Ark, Theran. Te: 51161. Telex: 2077. Cable: "Varatel" – L.P: Minister of Inf: H. E. Hooshang Ansary, Gen. Mgr. & Chief Eng: M. R. Atefi.

STATIONS (G.C: 51.27E/35.41N):

kc	m	kW	kc	m	kW	kc	m	kW
895	335.2	50	3870	77.52	100	11705	25.63	100
1325	226.5	100	7064	42.46	100	15105	19.86	100

HOME SCE. (R. Iran):
21.30–01.30 on 895/3870kc, 02.30–06.30 on 1325/3870/7064kc, 08.20–15.30 on 1325/3870/7064kc (also on 11705/15105kc to Europe), 16.30–20.30 on 1325/3870/7064kc (also on 11705kc to Europe). N. in Farsi: 21.30, 22.30, 23.30, 00.30, 01.30, 02.30, 03.30, 04.30, 05.30, 06.30, 08.20, 09.30, 10.30, 11.00, 12.30, 13.30, 14.30, 15.30, 16.30, 17.30, 19.30, 20.30.

FOREIGN SCE. to Europe: 17.30–21.30 on 11705/15105kc.
17.30 Russian, 18.00 Turkish, 18.30 Arabic, 19.30 French, 20.00 English, 20.30–21.30 Special Prgr. for Iranians Abroad.

REGIONAL STATIONS

R. TABRIZ: On 650/6155kc (7.5/5kW): 02.25–05.00, 08.00–11.00, 13.25–18.30. Armenian 18.00–18.30.

R. REZAIEH: On 976/6940kc (0.5kW): 07.30–09.00, 11.50–17.30. Kurdish 13.30–14.00, Armenian 14.00–14.30, Assirian 14.30–15.00, Turkish 15.30–16.00.

R. ISFAHAN: On 1425/7888kc (1/0.4kW): 06.25–09.00, 11.45–17.30.

R. ZAHEDAN: On 777kc(100kW): 07.30–09.30, 12.55–19.30. Baluchi 04.00–05.00, Urdu 05.00–06.00.

R. SANANDAJ: On 1475/6818kc (1/0.4kW): 02.45–04.30, 11.15–17.30.

RADIO IRAN رادیو ایران

MINISTRY OF INFORMATION

Offers You its Service

Information Service:

Provides assistance and guidance to all foreign correspondents and news agency representatives visiting Iran, including interviews with personalities and visit to historical and developed sites also prepares and distributes publications, documentary films, slides and photographs on Iran.

International Service:

Conducts news in Farsy, English, French, Arabic, Turkish and local regional languages, and musical programme exchange with their description in foreign languages.

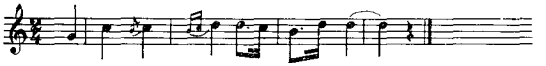
All services are free of Charge

Interested news agencies and broadcasting organizations throughout the world are invited to contact:

MINISTRY OF INFORMATION

Meidan Ark, Tehran, Iran – Tel. 51161-4

R. KERMANSHAH: On 985kc (100kW): 06.30–09.00, 11.00–18.30. **Kurdish** 15.45–18.30.
R. GORGAN: On 1462/6520kc (1.04kW): 12.15–17.30. **Turkuman** 16.00–17.30.
R. SHIRAZ: On 1060/4500kc (1/0.4kW): 06.25–08.30, 12.25–18.30.
R. RASHT: On 680kc(1kW): 06.15–09.30, 12.45–17.30.
R. KERMAN: On 1090kc(1kW): 06.15–08.30, 12.45–16.30.
R. MASHAD: On 1100kc(1kW): 07.20–08.30, 13.00–17.00.
R. AHWAZ: On 1390kc(100kW): 12.30–20.30. **Arabic** 14.30–20.30.
ANN: E: "This is Tehran, R. Iran". F: "Ici Tehran, R. Iran". Turkish: "Burasi Tahran, Iran Radyosu". Russian: "Govorit Tegeran, R. Iran". Farsi: "Inja Tehran ast, R. Iran". Urdu: "R. Iran-Zahedan". Kurdish: "Dani Irana, Bashi Kurdi". Arabic: "Huna al Ahwaz, Der'el Isa'a al Iraniya". Baloochy: "Ada Zahedan, R. Iran". Armenian: "Tavrizne khosoom". Assirian: "Lakha Rezaieh, R. Azerbayjan Ma'arvesta" – **INT-SIG:** Iranian melody played on Tar (Iranian string instrument). Beginning of the "Mahoor" one of the seven sets of Iranian music.



V. by QSL-card. Rp. Recordings accepted – **PUB:** "Iran Today" (Quarterly magazine) in E, F, G. "Facts about Iran" (Weekly bulletin) in E, F, Arabic – **F.PL:** New Gov. Iranian National Radio and Television – **AD:** Allowed, income goes straight to the Treasury.

IRAQ

L.T: GMT+3 h – **Pr.L:** Arabic, Kurdish, Turkuman.
BROADCASTING STATION OF THE REPUBLIC OF IRAQ (Gov.)
ADDR: Directorate Gen. of Broadc. and Television, Salihiya, Baghdad. **Te:** 31101. **Cable:** Broadcasts – **L.P:** Dir. Gen: M. Al-Jadir. Dir. Tec: K. Amin.
STATIONS (G.C: sw-tr's: 44.35E/33.09N).

kc	m	kW	kc	m	kW	kc	m	kW
764	392.6	150/300	3990	75.19	50	6155	48.74	50
908	330.0	200	6030	49.75	100	7180	41.78	100
1350	222.2	20	6095	49.22	100	9555	31.40	50
3240	92.59	50				9635	31.14	50

HOME SCE: Arabic: 02.30–05,30 on 908/6155/7180kc, 05.30–07.00 on 908/6155kc, 10.00–22.00 on 908/764/3990/6155/7180/9555kc, 22.00–22.15 on 908/3990/7180/9555kc.
N: 03.00, 05.00, 11.00, 15.00, 16.00, 17.00, 19.00, 22.00, also at 18.30, 21.00 on 764/3990kc.
Kurdish, Turkuman: 02.30–05.30 on 1350/3240/6030kc, 05.30–07 00 on 1350/3240kc, 10.00–18.30 on 1350/3240/6030kc.
FOREIGN SCE: To Near- & Middle East: 17.30–19.30.
Urdu: 17.30–18.00 on 6030/9635kc; **Persian** (Farsi): 18.00– 18.45 on 3240/6030kc; **Turkish:** 18.45–19.30 on 3240/6030kc.
To Europe: 19.30–22.00 on 6030/6095kc.
English: 19.30–20.20, **German** 20.20–21.00, **French** 21.10–22.00.
ANN: "Idha'at Al-Jemhoriya Al-Iraqiya Fi Baghdad" (The Broadcasting Service of the Iraqi Republic in Baghdad) – English: "This is R. Baghdad". French: "Ici R. Baghdad". German: "Hier ist R. Baghdad" – **INT-SIG:** Soft chirps of a mechanical nightingale – **V.** by QSL-card. Re. to Chief Eng. Recordings accepted.

ISRAEL

L.T: GMT+2 h – **Pr.L:** Hebrew, Arabic.
ISRAEL BROADCASTING AUTHORITY (Gov.)
ADDR: Kol Yisrael, Israel Broadc. Sce, Broadc. House, Jerusalem. **Cable:** Kolyisrael. **Te:** 28161 – **L.P:** Dir. Gen: H. Givton. Dep. Dir. Gen: I. Hofman. Asst. Dir. Gen (Planning): Dr. Y. Spiro. Dir. Prgr: Mrs. L. Porath. Dir. N. & Current Events: A. Gordon. Dir. Overseas Broadc. & Foreign Rel: G. Wigoder. Dir. Arabic Prgr: Y. Hazma. Dir. Operations: N. Rogel. Public Rel: Mrs. Y. Doron. Dir. Tec: M. Berman – Ministry of Posts.
STATIONS: Medium Waves:

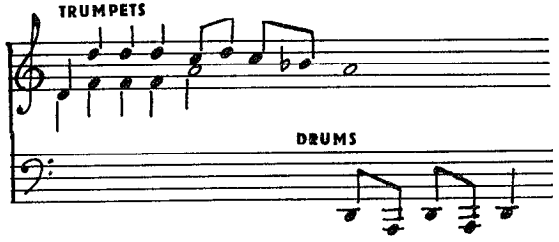
kc	m	kW	Call	Prgr.	kc	m	kW	Call	Prgr.
575	522	50/10	4XB36	A	1025	292	0.5	4XB48	B
656	457	100	4XB47	B	1097	273.5	1	4XB43	A
710	422.5	1	4XB20	B	1169	256.6	1	4XB23	A
737	407	100/200	4XB34	D	1205	249	10	4XB35	A
845	355	1			1358	220	0.5	4XB53	A

Short Waves (G.C: 34.47E/32.04N):

kc	m	kW	Call	Prgr.	kc	m	kW	Call	Prgr.
9009	33.30	50/7.5	4XB31	C	9625	31.17	100	–	C
9725	30.85	100	4XB51	E	11910	25.19	100	–	C
7189	41.73	20	4XB49	D					

HOME SERVICE:
Main Prgr. in Hebrew (Prgr. A) on 575/1169/1205/1358/845/881kc 04.00–06.00, 09.30–12.00, 14.30–21.00 – N: 04.00, 05.00, 06.00, 11.30, 15.00, 17.00, 18.30, 21.00.
Prgr. in Hebrew, Yiddish, Ladino, French, English, Rumanian, Hungarian on 656/710/1097kc: 06.00–09.30, 11.00–21.00. N: **English:** 11.00, 18.45. **French:** 11.30, 18.30 – **Arabic Prgr:** D on 737/1025/7189kc: 04.30–05.15, 11.15–12.15, 15.30–21.15.
ANN: Home Sce: "Kolyisrael Miyerushalayim". **INT-SIG:** Traditional Bible cantillation played on oboe strings.

FOREIGN SCE. on 9009/9625kc (prgr. C)
9009kc (omnidirectional); 9625kc: 16.00–20.00 to Europe, 20.15–20.30 to So. Africa, 20.45–21.25 to Europe, 21.15–22.15(Sun only) to. No. Atlantic. 9725kc: 16.00–20.00.
Yiddish 16.00–16.30, Persian 16.30–17.00, Russian 17.00–17.35, Hungarian 17.35–17.45, Rumanian 17.45–18.00, Ladino 18.00–18.15, Moghrabit 18.15–18.30*, Yiddish 18.30–19.00, Hebrew 19.00–19.30, Russian 19.30–20.00. **French** 20.45–21.05, **English** 21.05–21.25 (on 9725kc to Europe/UK, on 9009kc to So. Africa). Sun 21.15–22.15 for Seamen (in Hebrew) – N: at the beginning of each prgr. and 16.20, 18.50 (Yiddish) – *=Rel. Prgr. "B".
ANN: E: "This is Israel calling, you are tuned to Kol Zion"; F: "Ici Kol Yisrael, R. dif. Isralienne"; Hungarian: "Kol Yisrael, itt az Israeli Rádio"; Persian: "Inja Yerushalim, sedail Israel"; Rumanian: "Kol Yisrael, emisiunea in limba romina"; Yiddish: "Do iz Kol Yisrael, oiditsiye Kol Tsion" (Home Sce.) "Do is Kol Tsion, shalom fun Yerushalayim" (For. Sce.) – V. by QSL-card. **INT-SIG:** Hatiqva (Nat. Hymn).



FI: By state, licence payments, adv – **AD:** 5 min per h.

JAPAN

L.T: GMT+9 h – **Pr.L:** Japanese.

NIPPON HOSO KYOKAI (NHK)

(Public Corporation, non-Gov, non-comm.)
(The Japan Broadcasting Corporation).
ADDR: No. 2, 2-chome, Uchisaiwai-cho, Chiyoda-ku, Tokyo. **Cable:** "RADIONHK". **Te:** (501) 4111. **Telex:** TK 2377, 4338.
L.P: Chmn. (Board of Governers): T. Utsubo. Pres: Y. Maeda. Vice Pres: K. Ono. Dir. Gen. of Engineering: F. Mikuma. Gen. Man. Dir's: F. Mikuma, M. Akagi, I. Matsui, T. Nomura, H. Asanuma. Man. Dir's: K. Kawakami, M. Nagahama, T. Nagasawa. H. Sano. Auditor's: S. Monden, H. Sho, I. Nakayama. Dir's: Secr: H. Okada. Policy Planning Bureau: K. Kawakami. Man. Inf. Sce. Bureau: H. Matsuura. Public Rel. Board: T. Iida. Legal Affairs Board: I. Nihira. Audit Board: T. Matsunaga. Prgr. Inspection Board: F. Egami. Gen. Broadc. Adm: H. Asanuma. Educ. Dept: T. Yoshida. News Dept: K. Ogawa. N. Commentators Room: M. Hirano. Entertainm. Dept: T. Sakamoto. Tech. Operations Dept: Y. Sawamura. Prgr. Service Dept: K. Fujinei. Gen. Affairs Dept. Broadc. Center M. Michizu. Overseas Broadc. Dept: M. Tateno. Audience Services Dept: T. Nagasawa. Eng. Dept: K. Fujishima. Facilities Constr. Dept: N. Yoshida. Staff Adm. Dept: Y. Yoshida. Finance Dept: K. Uchiyama. Gen. Affairs Dept: K. Hori. Radio & TV Cult. Research Inst: Y. Kumagai. Public Opinion Research Inst: H. Kanasawa. Tech. Research Lab: M. Komai. Broadc. Science Research Lab: Y. Makita. C. Training Inst: N. Shimazaki.

STATIONS: Medium Waves: The medium wave (535–1605kc) tr's are used for domestic radio sce. in the 1st and 2nd net, both extensive enough to place the entire country under coverage. Number of stations (as of Sep. 1, 1966): 1st Network: 170 – 2nd Network: 129 – ¹= 1st net. – ² = 2nd net.

Call	kc	kW	Call	kc	kW	Call	kc	kW	Call	kc	kW
°Sapporo			Hakodate			Asahikawa			Wakkanai		
¹IK	570	100	¹VK	680	5	¹CG	620	3	¹IQ	980	1
²IB	750	100	²VB	1470	1	²CC	1470	1	²IY	1470	0.5
Nayoro			*Tokyo			Toyama			²RB	1370	10
¹CY	600	1	¹AK	590	100	¹IG	650	5	Nakamura		
²AZ	1320	1	²AB	690	100	²IC	1520	1	¹RQ	1000	1
Enbetsu			Kofu			°Osaka			²RY	1520	0.5
¹ –	790	1	¹KG	980	5	¹BK	670	100	Tokushima		
² –	1600	1	²KC	1470	1	²BB	830	100	¹XK	780	5
Obihiro			Nagano			Hikone			²XB	1520	1
¹OG	660	5	¹NK	620	1	¹BS	780	1	Takamatsu		
²OC	1080	1	²NB	1320	1	Kyoto			¹HP	1300	5
Kushiro			Matsumoto			¹OK	1300	1	²HD	1080	1
¹PG	640	10	¹SG	540	1	²OB	1510	1	°Kumamoto		
²PC	1070	10	²SC	1510	1	°Hiroshima			¹GK	930	10
Kitami			Iida			¹FK	770	10	²GB	1590	10
¹KP	1150	10	¹SQ	620	1	²FB	1070	10	Hitoyoshi		
²KD	1370	10	²SZ	1320	0.5	Onomichi			¹GQ	1240	1
Muroran			Niigata			¹DP	1000	1	²GV	1600	1
¹IU	780	3	¹QK	840	10	²DD	1470	1	Fukuoka		
²IT	1080	1	²QB	1190	10	Okayama			¹LK	610	100
°Sendai			Takada			¹KK	600	5	²LB	870	100
¹HK	890	10	¹QX	790	1	²KB	1600	5	Kitakyushu		
²HB	1090	10	²QV	1360	0.1	Matsue			¹SK	540	1
Akita			°Nagoya			¹TK	1490	10	²SB	1600	1
¹UK	760	10	¹CK	730	10	²TB	1090	10	Nagasaki		
²UB	1590	10	²CB	910	10	Tottori			¹AG	660	5
Yamagata			Takayama			¹LG	1300	1	²AC	1080	1
¹JG	540	5	¹CQ	790	1	²LC	1470	1	Kagoshima		
²JC	1470	1	²CZ	1320	1	Yonago			¹HG	580	10
Tsuruoka			Shizuoka			¹LQ	780	1	²HC	1220	10
¹JP	1440	1	¹PK	880	10	²LU	1520	1	Naze		
²JD	1600	1	²PB	760	10	Yamaguchi			¹HI	980	1
Morioka			Hamamatsu			¹UG	680	5	²HV	1600	1
¹QG	850	10	¹DG	650	1	²UC	820	5	Miyazaki		
²QC	1220	10	²DC	1520	1	Hagi			¹MG	540	1
Koriyama			Kanazawa			¹UQ	960	1	²MC	1470	1
¹CP	620	1	¹JK	1170	10	²UZ	1600	0.5	Nobeoka		
²CD	1510	1	²JB	1390	10	•Matsuyama			¹MT	620	1
Aomori			Nanao			¹ZK	960	5	²MX	1320	1
¹TG	960	5	¹JU	540	1	²ZB	1510	5	Oita		
²TC	1320	1	²JV	1470	0.1	Uwajima			¹IP	790	1
Hachinohe			Fukui			¹ZU	1440	1	²ID	1470	1
¹TQ	1300	1	¹FG	980	5	²ZY	1600	1	Saga		
²TZ	1510	1	²FC	1520	1	Kochi			¹SP	960	1
						¹RK	990	10	²SD	1320	1

+173 st's less 1kW not mentioned.
*=Headquarters •=Reg. Central St.

HOME SERVICE
1st Netw: D 20.00–15.00 – N: W: Every h and 04.30, 05.30, 06.30, 07.30, 08.35, 14.55. Sun: Every h exc. 01.00, 05.00, 11.00; also 14.55 – **Wrp:** W: 20.57, 21.13, 22.15, 23.58, 01.58, 02.55, 03.13, 03.58, 04.58, 05.58, 06.58, 07.32, 08.58, 09.50, 10.15, 11.58, 12.08, 13.08, 14.58. Sun: as on W exc. 03.58, 04.58, 07.32 – **Mbg:** W 21.50 – **T.S:** every h.
2nd Netw: D 20.30–15.00 – **English N:** W 09.55 – **L.L: Fundamental Course of English:** W 21.05–21.25, 06.10–06.25, 09.20–09.40. **English Conversation:** W 21.25–21.40, 06.45–07.00, 09.40–09.55. **German:** 14.20–14.40. **French:** 14.00–14.20 – **Wrp:** 00.15, 07.00, 13.00 – **School Broadc:** W 00.00–03.00, 04.00–04.15(not Sat).

FM STATIONS:

	Mc	kW		Mc	kW		Mc	kW
Sapporo	85.2	3	Aomori	86.0	1	Tottori	85.8	0.25
Hakodate	87.0	0.25	Hachinohe	81.8	0.1	Yamaguchi	85.3	0.25
Asahikawa	85.8	0.5	Tokyo	82.5	10	Hagi	82.4	0.1
Wakkanai	89.1	1	Kofu	85.6	1	Matsuyama	87.7	1
Nayoro	88.2	1	Nagano	84.0	0.5	Uwazima	84.8	0.1
Obihiro	87.5	0.25	Iida	81.3	0.1	Nihama	87.0	0.1
Kushiro	88.5	0.25	Nigata	82.3	1	Yawata-hama	86.5	0.1
Nakashibetsu	89.9	1	Nagoya	82.5	3	Kochi	87.5	0.5
Kitami	86.0	0.25	Owase	84.5	0.1	Nakamura	84.4	0.1
Kitami	84.5	0.1	Nakatsugawa	85.8	0.1	Tokushima	83.4	0.25
Monbetsu	85.1	0.1	Shizuoka	88.8	0.5	Takamatsu	86.0	1
Muroran	88.0	0.25	Hamamatsu	82.1	0.25	Kumamoto	85.4	1
Sendai	82.5	3	Kanazawa	82.2	1	Fukuoka	84.8	1
Akita	86.7	1	Nanao	84.4	0.1	Kitakyushu	85.7	0.25
Odate	88.3	0.1	Fukui	83.4	1	Nagasaki	84.5	0.25
Yuzawa	84.9	0.1	Toyama	81.5	1	Sasebo	86.0	0.25
Yamagata	82.1	1	Osaka	88.1	10	Kagoshima	85.6	1
Nagai	84.6	0.1	Maizuru	84.2	0.1	Akune	83.7	0.1
Tsuruoka	86.0	0.25	Hiroshima	88.3	1	Kanoya	84.1	0.1
Morioka	83.1	1	Miyoshi	84.5	0.1	Makurazaki	84.7	0.1
Kamaishi	85.1	0.1	Onomichi	84.8	0.25	Miyazaki	86.2	0.25
Kitafukuoka	84.9	0.1	Okayama	88.7	1	Nobeoka	87.0	0.1
Fukushima	85.3	1	Tsuyama	85.5	0.1	Oita	88.9	1
Wakamatsu	85.9	0.25	Matsue	84.5	0.5	Saga	81.6	0.25
Taira	86.1	0.1	Hamada	85.5	1			

National Treasure:
Himeji Castle

NHK

SPONSORED BY 98,000,000 PEOPLE

(As of September 1966)			Stations	Coverage
Domestic	TV (Color)	General	420	93.0%
		Educ.	410	92.0%
	Radio	1st	170	99.7%
		2nd	129	98.2%
		FM	80	82.0%
Overseas	General Sce. (Every h. on the h. in English & Japanese)			
	Reg. Sce. (18 transmissions in 23 languages)			

D 21.00–15.00 (Monophonic & Stereophonic broadc. in Pilottone system).

RELAYS OF HOME SCE. PRGR'S ON SHORTWAVES
(G.C: JKH 139.50E/36.10N – JKI 139.57E/35.46N)
1st Prgr: JKH 7230kc 41.49m 5kW: 20.00–22.15, 08.00–10.00; JKH2 9655kc 31.07m 5kW: 22.25–07.45 – **2nd Prgr:** JK1 7285kc 41.18m 5kW: 20.30–10.00.

FOREIGN SERVICE (R. Japan)
I=No. American Sce; II=No. & Latin American Sce; III=Hawaiian Sce; IV=European Sce; V=Latin American Sce; VI=Australia/NZ Sce; VII=So. Ea, Asian Sce; VIII=Asian Continent Sce; IX=Philippine/Indonesian/Malaysian Sce; X=Indonesian Sce; XI=Korean Sce; XII=So. Asian Sce; XIII=African Sce; XIV=M. East & No. African Sce.
Languages: a) English–b) Spanish, Japanese, English–c) English, Japanese–d) Russian, German, French, Italian, English, Swedish–e) German, English, Swedish–f) Japanese, Portuguese & Spanish–g) Standard Chinese, Fukienese, Cantonese–h) French, Vietnamese, Thai, Burmese, Standard Chinese, English, Fukienese, Cantonese–i) Standard Chinese, Russian–j) Standard Chinese–k) Indonesian, English, Malay–l) Indonesian–m) Korean–n) Hindi, English, Urdu, Bengali o) French, English, Swahili–p) French, English, Arabic.

STATIONS: 20/50/100/200kW – G.C: 139.37E/35.46N & 139.50E/36.10N.

kc	m	kc	m	kc	m	kc	m
6080	49.34	9700	30.93	11965	25.07	15425	19.45
6140	48.86	9705	30.91	15105	19.86	17725	16.93
7195	41.70	9740	30.80	15115	19.85	17755	16.90
7250	41.38	9765	30.72	15135	19.82	17785	16.87
9505	31.56	11705	25.63	15175	19.77	17795	16.86
9525	31.50	11725	25.59	15195	19.74	17825	16.83
9530	31.48	11780	25.47	15225	19.70	17855	16.80
9560	31.38	11800	25.42	15235	19.69	17870	16.79
9580	31.32	11815	25.39	15285	19.63	17875	16.78
9605	31.23	11855	25.31	15300	19.61	17895	16.76
9670	31.02	11865	25.28	15310	19.60	21520	13.94
9675	31.01	11875	25.26	15325	19.58	21610	13.88
9695	30.94	11940	25.13	15390	19.49	21640	13.86

GENERAL SERVICE in English, Japanese
All freq's 100kW exc. 15300kc using 200kW at 06.00–06.30, 07.00–07.30 & 08.00–08.30.

Times	kc	Times	kc
00.00–00.30	9700, 15105, 15425	12.00–12.30	9505, 9560, 9605
01.00–01.30	15105, 15300, 15425	13.00–13.30 / 14.00–15.00	
02.00–02.30 / 03.00–03.30 / 04.00–04.30 / 05.00–05.30	15105, 15195, 15300	15.00–15.30 / 16.00–16.30 / 17.00–17.30	9505, 9560, 9605
06.00–06.30 / 07.00–07.30 / 08.00–08.30 / 09.00–09.30	9505, 15195, 15300	18.00–18.30 / 19.00–19.30 / 20.00–20.30	9560, 9605, 15195
10.00–11.00 / 11.00–11.30	9505, 9605, 15300	21.00–21.30 / 22.00–22.30	9605, 9700, 15195
		23.00–24.00	9700, 15105, 15425

N. in English: Every h on the h.

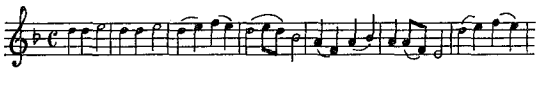
REGIONAL SERVICES: Freq's in fat types=200kW; * 20 or 50kW; others 100kW.

Times	Sce.	kc	L	N. in English
23.45–00.45	I	11780, **15135**	a	23.45–00.05
01.00–03.00	II	**15135**, 15235, 17825	b	02.00–02.10
06.30–07.30	III	11705, 15235*	c	06.30–06.40
06.30–08.30	IV	**15135**, 17825	d	08.00–08.10
09.00–10.30	V	9530, 9765, 11780	f	
09.30–10.30	VI	11875, 15235	a	09.30–09.50
10.00–11.00	VII	6080*, 7195*, 9705*	g	
11.00–12.00	VIII	7250, 9675*, 11705	i	
11.30–13.00	IX	9525, 11780, 11940	k	12.00–12.10
12.00–13.00	XI	6080*, 6140*, 7195*	m	
12.30–15.30	VII	**9675**, 11705, 11875	h	14.30–14.40
13.30–15.00	XII	9525, 9765, 11780	n	13.55–14.05
15.15–15.45	X	9525, 11780, 11940	l	
16.00–17.00	XIII	7195, **9670**	o	16.15–16.25
17.30–19.00	XIV	7195, **9525**	p	18.00–18.10
19.30–20.30	IV	9700, **11965**	e	20.00–20.10
22.00–22.30	XI	6080*, 6140*, 7195*	m	
23.00–23.30	VIII	7250, 9675, 11705	j	

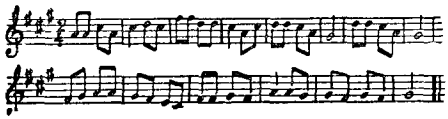
NEWS (in other languages): **French:** 16.00 (XIII), 17.30 (XIV), 07.30 (IV), 12.30 (XII) – **German:** 07.00 (IV), 19.30 (IV) – **Portuguese:** 09.30 (V) – **Russian:** 06.30 (IV), 11.30 (IX) – **Spanish:** 01.00 (II), 10.00 (V) – **ITALIAN HOUR:** Mon 07.40–08.00 (IV) – **SCANDINAVIAN HOUR:** Sun, Wed 08.15–08.30, 20.15–20.30 (IV).
DX-PRGR (included in "Listeners Corner"): Sat 00.30–00.45 (I), 02.45–03.00 (II), 10.15–10.30 (VI); Sun 12.20–12.30 (IX), 14.15–14.25 (XII), 14.50–15.00 (VII), 16.35–16.45 (XIII), 18.20–18.30 (XIV).

Japan

ANN: Home Service: The call sign and the station name are announced *at the commencement and end of each transmission. At intervals* between programmes an announcement, "NKH" is made at the end of the news prgr's of both 1st network and of FM network. It also comes before the call sign of 2nd network.
Foreign Service: English: "This is Radio Japan, the overseas broadcasting service of NHK. We are broadcasting to...("target area")" – **French:** "Ici Radio Japon...(target area)" – **German:** "Hier ist Tokyo, der japanische Rundfunk...(target area)" – **Italian:** "Buon giorno, sign. radioascoltatori Italiani. Qui Radio Giappone – Reparto Servizio Internazionale di NHK..." – **Spanish:** "Aqui Radio Japon..." – **Portuguese:** "Estao ouvindo a Radio Japao..." – **Indonesian:** "Inilah Radio Djepang, siaran international dari NHK di Tokio...".
INT-SIG: Home Service: Both on the 1st and the 2nd networks, a musical sign is beamed on a celeste before commencing broadcasting. *No interval signal is used since both the 1st and the 2nd networks are* continuously on the air – **Foreign Service:** Opening music of Reg. Sce's "Sakura"



Interval signal music "Kazoe Uta"



PUB: In Japanese only: Graph NHK (twice a month), Hoso Bunka or Broadcast Culture (monthly), NHK Year Book (annual). In English and others: NHK Handbook (annual in E), NHK Today and Tomorrow (monthly in E, F, Sp), Radio Japan News (monthly in E, J, Sp and others), This is NHK (annual in E), Radio & TV program Schedules (annual in E), NHK Technical Monograph (irr. in E), NHK Laboratories Note (annual in E), The prgr. schedules for *Overseas Service (R. Japan), Studies of Broadcasting (annual in E).* **V.** by QSL-card and by letter – **FI:** In accordance with the Broadcast Law, NHK's operations are financed by the revenue from subscription fee – **ALF:** 600 Yen.

PRIVATELY OWNED COMMERCIAL BROADCASTING STATIONS

THE NATIONAL ASSOCIATION OF COMMERCIAL BROADCASTERS IN JAPAN

ADDR: No. 3, Kioi-cho, Chiyodaku, Tokyo. **Te:** 571-9936. **Cable:** Kyobashi Mimporen.
L.P: Board of Dir's: Pres. T. Adachi. Vice Pres: E. Horiuchi, S. Takahashi. Exec. Dir: S. Sakai. Dir's: Y. Hattori, T. Tobishima, K. Shikakura, Y. Shimizu, R. Matsumoto, Y. Akao, U. Suzuki, K. Iwai, M. Minami, T. Yamauchi, S. Mizuno, Y. Sawamura, K. Tanaka, K. Nomura, H. Kaneko, S. Tanaka, Y. Suzuki, Auditors: Takeharu, O. Oda.
Counsellors: K. Kuga.
Medium Waves: Call: JO--.

	Call	kc	kW		Call	kc	kW		Call	kc	kW
1)	CR	560	10	12)	NF	1100	1	34)	LF	1310	50
2)	DF	720	5	19)	WO	1100	1	35)	SF	1330	10
3)	IL	720	1	20)	GF	1100	1	36)	ER	1350	10
4)	JF	740	5	21)	BW	1110	1	37)	UF	1380	20
5)	LR	740	5	22)	MR	1110	5	38)	VR	1400	5
6)	SO	860	1	23)	CF	1110	5	7)	QL	1400	5
7)	HE	860	3	24)	AF	1120	5	3)	IF	1410	10
8)	PR	860	5	25)	DR	1120	5	39)	YR	1420	5
7)	QF	860	3	26)	QR	1130	50	7)	TL	1420	1
9)	HF	900	5	21)	BR	1140	10	30)	GO	1430	1
10)	ZR	900	5	22)	MO	1200	1	40)	VF	1430	3
7)	HO	900	5	6)	SW	1200	1	41)	ZF	1430	1
11)	EF	920	5	27)	BF	1200	5	7)	QM	1450	5
11)	8AB	920	1	28)	YF	1200	1	42)	KF	1450	5
12)	–	920	1	29)	OR	1210	20	14)	PL	1460	1
13)	TR	940	5	18)	UR	1230	5	18)	UO	1460	1
14)	PF	940	5	30)	GR	1230	5	43)	WF	1460	5
15)	KR	950	50	31)	IR	1260	10	44)	RF	1480	10
16)	NR	1010	20	32)	FR	1270	10	32)	FO	1530	1
17)	AR	1050	10	7)	HW	1280	5	25)	DO	1530	1
6)	SR	1100	1	33)	JR	1280	5	45)	XF	1530	1
18)	MF	1100	1	7)	HR	1290	10				

+ 71 low power st's less 1kW not mentioned.

1) **R. Kansai Ltd,** 1–1, Miyuki-cho, Sumaku, Kobe. **Te:** 71-4321. Chmn: H. Miayzaki. Pres: K. Tanaka. Dir. Gen: S. Sekiguchi. 20.30–15.00. **V.** by QSL-card – 2) **Iwate Broadc. Co,** 1–6, Shikecho, Morioka. Pres: T. Ota. Dir. Gen: M. Yoshida. 20.00–15.00.
3) **Kyushu Asahi Broadc. Co,** Nagahama-cho, Fukuoka. Chmn: I. Dan. 20.30–15.40. **V.** by QSL-card – 4) **Yamanashi Broadc. System Inc,** 33–2, Marunouchi, Kofu. Pres: J. Noguchi. 20.30–14.45.
5) **Kita-Nihon Broadc. Co,** 18–10 Ushijma, Toyama. Pres: R. Yokoyama. 21.50–14.10 – 6) **Shinetsu Broadc. Co,** 132–1, Yoshida, Nagano. Pres: T. Ishihara. 20.00–15.05 – 7) **Hokkaido Broadc. Co,** North 1, West 5, Sapporo, Hokkaido. **Te:** 0122-23-8181. Pres: S. Abe. Dir. Tec: K. Kamo. **D.Prgr: N:** 20.55, 22.55, 23.55, 00.55, 01.55, 02.45, 03.40, 04.55, 05.55, 07.55, 08.55, 09.30, 13.50. **V.** by QSL-card. Prgr.schedule free – 8) **Fukui Broadc. Co,** 501 Ote-machi, Fukui. Pres: S. Kato. Dir. Gen: Y. Yoshida – 9) **San In Broadc. System,** 423, Nishifukuhara, *Yonago. Chmn:* H. Sakaguchi. Pres: O. Oda. 20.35–15.05.
10) **R. Kochi Broadc. Co,** Kochi. Chmn: G. Fukuda. Pres: M. Katada.
11) **Yamagata Broadc. Co,** Yamagata. Pres: T. Hattori. 20.00–14.45. **V.** by QSL-card – 12) **Miyazaki Broadc. Co,** Miyazaki. Chmn: S. Iwakiri. Pres: Y. Kuroki. 20.30–15.05. **V.** by QSL-card – 13) **Akita Broadc. System,** Akita. Chmn: S. Hitomi. Pres: G. Kurata. 20.00–14.40 – 14) **Yamaguchi Broadc. Co,** Tokuyama. Pres: K. Nomura. 20.30–15.00. **V.** by QSL-card.
15) **Tokyo Broadc. System,** Main Office: Akasaka, Minato-ku, Tokyo. **Te:** 584-3111. **Cable:** JOKR. Chmn: T. Adachi. Pres: J. Imamichi. Dir. Gen: Y. Tanaka. Dir. Tec: H. Miyake (radio), M. Akagi (TV). Dir. Prgr: S. Sakamoto (radio), M. Maehara (TV). 20.00–16.30(Sun 17.00). **N:** 5 min every h. **Ann:** "JOKR Kochirawa Tokyo Hoso desu". E: "JOKR This is TBS". **V.** by QSL-card. Recordings accepted.
16) Asahi Broadc. Corp, Main Office and R. st: 2–2, Dyodocho, Oyodoku, Osaka. Tokyo Office: Yurakucho, Tokyo. **Te:** (06)458-5321. **Cable:** JONRTV. **L.P:** Pres: K. Suzuki. Vice Pres: T. Hirai. Dir. Gen: K. Hara, D. Ado. Man. Dir: M. Kobayashi, T. Sudo. Dir. Tec: S. Kitamura. Dir. Tokyo Office: K. Tamura. **D.Prgr:** 20.00–17.00. **N:** 21.00, 22.00, 23.00, 24.00, 02.00, 03.00, 04.00(W), 05.00(W), 06.00, 07.00(W), 08.00(W), 09.00(W), 09.50(Sun), 13.00, 14.00. **Ann:** "ABC Asahi Hoso, JONR". **V.** by QSL-card. **Re.** in E. Recorded re. preferred.
17) **Chubu-Nippon Broadc. Co,** 4–15 Shinsakae-machi, Naka-ku, Nagoya. **Te:** 241-8111. Pres: K. Sasabe. **D.Prgr:** 20.30–16.00. **N:** every h 21.00–09.00 and 09.15, 12.45, 14.50. **V.** by QSL-card. Prgr. schedule free – 18) **Nagasaki Broadc. Co,** Nagasaki. Pres: R. Nakabe.
19) **R. Fukushima Broadc. Co,** Fukushima. Pres: T. Tobishima. 20.00–*15.30 – 20) Oita Broadc. Sce, Oita. Pres: Y. Hoshino.* 20.30–15.00. **V.** by QSL-card – 21) **Kinki Broadc. System Co,** Nakakyo-ku, Kyoto. Chmn: T. Nakano. Pres: U. Shiraishi. 20.30–16.00. **N:** every h on the h from 21.00. **V.** by QSL-card. Prgr. schedule on request.
22) **Hokuriku Broadc. Co,** Kanasawa. Chmn: Y. Miyashita. Pres: Y. Saga. 20.30–15.00 – 23) **Minaminihon Broadc. Co,** 17, Korai-cho, Kagoshima. Chmn: K. Ueno. Pres: S. Hatanaka. 23.50–13.55. **V.** by QSL-card – 24) **Nankai Broadc. Co,** Matsuyama. Pres: Y. Yamanaka.
25) **Broadc. System of Niigata,** 2–18 Kawagishicho, Niigata. Pres: E. Horiuchi.
26) **Nippon Cultural Broadc. Inc,** Shinjuku, Tokyo. Pres: S. Mizuno. Mgr: S. Tomoda. 20.00–16.55. **Ann:** "Okiki no hoso wa Bunka Hoso 1130kc desu". **V.** by QSL-card.
27) **Kumamoto Broadc. Corp,** 30, Yamasaki-machi, Kumamoto. Pres: R. Fukami. *23.50–04.40 & 08.30–16.30 – 28) Ibaraki Broadc. System,* 126 Kita, Mito. Pres: T. Goto.
29) **Mainichi Broadc. System Inc.** Head Office: 53, Funadaiku-cho, Dojima, Kita-ku, Osaka. Tokyo Office: Yuraku-cho, Chiyodaku, Tokyo. **Te:** Head Office: 361-8231. **Cable:** Mainichihoso, Osaka. Chmn: C. Honda. Pres: S. Takahishi. 20.30–16.00. **N:** every h on the h 21.00–07.00, 09.00, 14.00. **Ann:** "MBS, Mainichi Hoso desu". **V.** by QSL-card. Prgr. schedule on request.
30) **Aomori Broadc. Corp,** 72 Fukuda, Matsumori, Aomori City. Chmn: S. Takeuchi. Pres: I. Sakamoto. Dir. Tec: H. Tomura. **D.Prgr: N:** 21.00, 22.00, 24.00, 01.00, 03.00, 04.00, 05.00, 06.00, 08.00, 09.30, 13.00. **V.** by QSL-card.
31) **Tohoku Broadc. Co,** Sendai. Pres: C. Kanno. 20.30–15.15.
32) **RKB Mainichi Broadc. Co,** Fukuoka. Pres: H. Kaneko. 20.45–*15.45 – 33) Shihoku Broadc. Corp, Tokushima. Chmn:* S. Maekawa. Pres: T. Yamauchi. 20.30–16.10.
34) **Nippon Broadc. System, Inc,** Yuraku-cho, Chiyoda-ku, Tokyo. Chmn: K. Uemura. Pres: N. Shikanai. 24 h. **N, Wrp:** 00.30, 01.30, 03.30, 05.30, 06.30, 07.30, 09.30, 11.30, 12.30, 13.30, 14.30, 15.30, 17.30, 23.30. **Ann:** "Okiki no Hoso wa 1310kc Shutsu-ryoku 50kW de ookuri shiteiru Nippon Hoso desu" ("This is Nippon Hoso"). **V.** by QSL-card.
35) **Tokai R. Broadc. Co,** Higashi-ku, Nagoya. Pres: M. Abo. 20.00–18.00. **V.** by QSL-card.
36) **R. Chugoku Co,** Motomachi 34, Hiroshima. **Te:** 21-4191. L.P: Chmn: S. Fujita. Pres: T. Tsukifuji. Dir. Tec: T. Watanabe. **D.Prgr: N:** 21.00, 22.00, 22.55, 23.55, 00.55, 01.55, 02.45, 03.55, 06.00, 07.55, 12.45, 13.55. **V.** by QSL-card. Re. in E.
37) *Osaka Broadc. Corpo, 27 Umeda-cho, Kita-ku, Osaka.* **Te:** 361-

12716. Pres: H. Maeda. 20.30–17.30. Ann: "Okiki no hoso wa Rajio Osaka desu". Int-Sig: Gong. V. by QSL-card. Recordings accepted.
38) **Shizuoka Broadc. System**, Shizuoka. Chmn: K. Komuratani. Pres: M. Oishi. 20.30–14.30 – 39) **Sanyo Broadc. Co**, Okayama. Chmn: H. Taniguchi. Pres: M. Tatsumi. 20.30–15.00. V. by QSL-card.
40) **Wakayama Broadc. Corp**, Wakayama. Chmn: K. Maeda. Pres: O. Tsubota. 20.30–15.30 – 41) **R. Gifu Broadc. Co. Ltd**, 9 Imako-machi, Gifu City. Pres: T. Yamada – 42) **Nishi-Nippon Broadc. Co**, Chmn: T. Hirai. Pres: J. Hirai – 43) **Sapporo TV Broadc. Co**, 1 chome-Nishi, Minami Ichijo, Sapporo. Pres: R. Hagiwara. Pres: T. Kubota.
44) **R. Kanto**, Oimatsu-cho, Nishi-ku, Yokohama. Chmn: H. Sasaki. Pres: K. Koshida. 20.00–16.35. V. by QSL-card – 45) **R. Tochigi Co**, Tochigi Hall, Utsunomiya. Pres: Y. Fukushima.
46) **Nihon Shortwave Broadc. Co. Ltd.**
*=Sapporo; others Tokyo – **=2nd Prgr.

Call	kc	m	kW	Call	kc	m	kW
46) JOZ	3925	76.43	50	46) JOZ2	6055	49.55	50/10
46) JOZ5	**3945	76.05	10	46) JOZ6	**7230	41.49	10d
46) JOZ4	*3945	76.05	10d	46) JOZ3	9595	31.27	50/10

(G.C: Tokyo 139.42E/35.48N): 9–15 Akasaka, 1-chome, Minato-ku, Tokyo. Te: 583-8151. L.P: Chmn: S. Odajima. Pres: M. Nakajima. Gen. Mgr: S. Ando. Dir. Tec: T. Kawahara. D.Prgr: 1st Prgr: 20.30–15.50 on 3925/6055/9595kc: 20.30–23.00 & 07.45–15.50. N: 23.30, 08.30, 11.30 (on 3945kc only). 2nd Prgr: 23.00–07.45 on 3945/7230kc. N: 03.30. L.L: "Lets learn Japanese" (presented in English): Mon–Fri 23.15–23.30 (prgr. 2), 10.45–11.00 (prgr. 1). Ann: "Okiki no hoso wa Nihon Tampa Hoso desu". Int-Sig: Slow tempo chime with Japanese musical instrument "Koto" at sign on and sign off. V. by QSL-card. Recordings accepted.

FM-TOKAI (Comm.)

ADDR: 28 Somigaya 2-chome, Shibuay-ku, Tokyo. Te: 467-5123. STATIONS: 2tr's on 84.5Mc (both 1kW) – HOME SCE: 20.20–15.30. N: 23.00, 03.00(W), 06.00(W), 08.00 – ANN: "Kochirawa FM-Tokai desu, JS2H" – V. by letter. Re. in E. Rp.

FAR EAST NETWORK (AFRTS)

The network serves the members of the US-Forces serving in the F. East – Authority: The st's in Japan broadcasts by authority of the Commander, US Forces, Japan, in cooperation with the Japanese Radio Regulatory Bureau. St's are linked by land line, and operated 24 h daily – ADDR: Headquarters, Far East Network, APO, San Francisco 96267. Te: Tokyo 5166-269 – L.P: Chief Lt. Col. H. H. Harlan. Dir. Prgr: J. F. Buey. Dir. Tec: H. Yaskal.
STATIONS: °=Short Wave. (G.C: 139.37E/35.46N)

Location	kc	kW	Location	kc	kW
Tokyo	°810	10	Chitose	1570	0.25
Iwo Jima	1500	0.1	Sasebo	1570	0.25
Itazuke	1550	10	Misawa	1580	0.25
Wakkanai	1580	0.1	Iwakuni	1580	1

Short Waves: *=Tokyo.
3910kc 76.73m 10/1kW: 07.15–22.40 10kW, 22.50–07.05 1kW.
6155kc 48.74m 10kW: 24 h[3].
11750kc 25.53m 10/1kW: 22.50–07.05 10kW, 07.15–22.40 1kW.
15260kc 19.66m 1kW: 24 h[4].
* Power and direction vary to meet point to point commitments for rebroadc. from AFRTS st's in Japan, Korea, Okinawa, Taiwan, Iwo-Jima – N: Every h on the h.
ANN: "This is the Far East Network... Far East Network, Tokyo (Chitose, Itazuke etc.)" plus freq's on shortwave – V. by QSL-card – PUB: Master schedule (monthly).

JORDAN

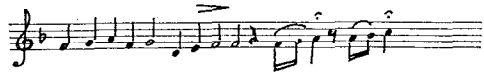
L.T: GMT+2 h – Pr.L: Arabic, English.

THE BROADCASTING SERVICE OF THE HASHEMITE KINGDOM OF JORDAN (Gov.)

ADDR: P.O. Box 909, Amman. Cable: Broadcasting. Te: 37711.
L.P: Minister of Inf: H. H. A. Sharaf. Dir. Gen. of Broadc: H. E. N. Rafie. Asst. Dir. Gen. Eng: A. Bayat. Asst. Dir. Gen. Adm: J. Tell. Dir. Tec: A. Bayat. Dir. Prgr. M. Shahid.
STATIONS: Amman (exc. 677kc Jerusalem) (G.C: 35.56E/31.57N).

kc	m	kW	kc	m	kW	kc	m	kW
800	375.0	100	9530	31.48	100	11870	25.27	100
677	443.0	20	9560	31.38	100	11970	25.06	100
6020	49.83	3	9740	30.80	100	15170	19.78	100
7155	41.92	100	11810	25.40	5	15345	19.55	100

HOME SCE: Amman: Arabic: 03.30–07.30 on 677/800/7155/11810kc; 07.30–14.00 on 800/9530/11810kc; 14.00–23.00 on 800/7155/9530/11810kc; also on 677kc at 18.30–23.00. N: 05.00, 06.00, 08.00, 12.00, 13.00, 16.00, 17.00, 19.00, 21.00, 22.00.
Jerusalem: English: 10.00–18.30. Arabic: 09.00–10.00.
FOREIGN SERVICE
So. American Sce: Arabic, Spanish: 23.30–00.30 on 15170 (stand by 11870, 15345kc) – N: Spanish 23.30, Arabic 00.00.
ANN: Arabic: "Hunna Amman Ithaatul Mamlakate Al Urdoniete Al Hashemieh" – E: "This is Amman the Broadcasting Service of the Hashemite Kingdom of Jordan" – Sp: "Aqui Radio Amman, R. Dif. Del Reino Hashemita De Jordania".



INT-SIG: Clarinet, piano.
V. by QSL-card or letter. Recordings accepted.

KOREA (Peoples Democratic Republic)

L.T: GMT+9 h – Pr.L: Korean.

KOREAN CENTRAL BROADCASTING STATION

ADDR: Korean Central Broadc. Committee, Pyongyang.
STATIONS: Medium Waves:

kc	kc	kc	kc	kc	kc
605	635	685	735	800	850
625	655	725	785	820	1080

Short Waves: 2×120 kw, 2×240 kw tr's.

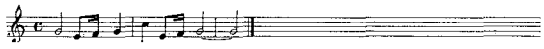
kc	m	kc	m	kc	m	kc	m
2850	105.3	6290	47.69	6600	45.45	11765	25.50
3320	90.34	6400	46.87	6650	45.11	14510	20.64
6250	48.00	6540	45.87	7580	38.22	15520	19.33

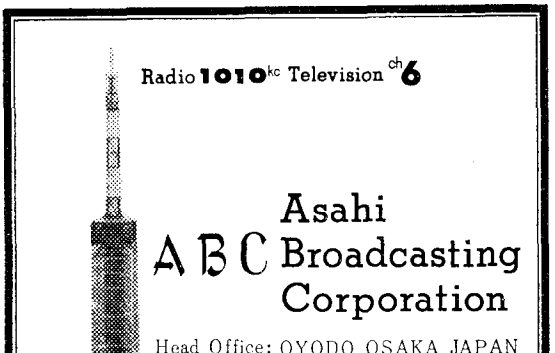
HOME SCE. in Korean: 1st prgr: 20.00–15.00 on 725/785/2850/6290/6600kc. 2nd prgr: 20.00–17.00 on 655/685/735/800/850/1080/6250/6400 kc, 20.00–23.00 & 08.00–17.00 on 3320kc

FOREIGN SERVICE: I=Near & Middle East/Africa; II=So. Ea. Asia; III=Latin America; IV=Europe; V=Far East; VI=Japan.

Chinese	Area	kc	Japanese	Area	kc
22.00–23.00	II	6540,11765	03.00–04.00	VI	635,6540,7580
10.00–11.00	II	6650,7580	09.00–15.00	VI	635,6540
12.00–13.00	II	6650,7580	**Korean**		
			02.00–03.00	II	6540,15520
English			16.00–17.00	II	6540,7580
04.00–05.00	I	6540,15520	20.00–21.00	I	6540,7580
08.00–09.00	II	6540,15520	00.00–01.00	III	11765,14520
11.00–12.00	II	6650,7580	**Russian**		
14.00–15.00	II	6650,7580	09.00–10.00	V	6650,7580
19.00–20.00	I	6540,7580	13.00–14.00	V	6650,7580
			17.00–18.00	IV	6540,7580
French			**Spanish**		
15.00–16.00	II	6540,7580	23.00–24.00	III	11765,14510
12.00–22.00	I	6540,7580	01.00–02.00	III	11765,14510

INT-SIG:





KOREA (Republic of)

L.T: GMT+9 h – Pr.L: Korean.

THE KOREAN BROADCASTING SYSTEM (Gov.)
ADDR: Overseas Broadcasting Station, Yejangdong 8, Chung-ku, Seoul. Te: 23-1676 – L.P: Bureau Dir: C. Hong. Chief Eng: I. K. Lee. Overseas Sce. (HLSA): C. P. Noh. Home Sce: St. Dir. (HLKA): H. S. Lee. Dir. TV (HLCK): J. Y. Kim.
STATIONS:
Medium Waves: °=Short Wave.

Name	Call	kc	kW	Name	Call	kc	kW
Sogwipo	HLCF	540	1	Chongju	HLKQ	920	1
Hongsung	HLCZ	540	1	Chulwon	HLCO	920	1
Youngwol	HLCV	540	1	Andong	HLCR	940	1
Chinju	HLCJ	560	1	Cheju	HLKS	940	1
Chonju	HLKF	570	10	Seoul	HLCA	°970	500
Masan	HLKD	570	1	Namwon	HLKL	1030	1
Kangnung	HLKR	575	10	Hwachun	HLCG	1030	1
Seoul	HLSA	°600	100	Choongju	HLCH	1090	1
Choonchun	HLKM	650	1	Samchok	HLCI	1120	1
Kwangju	HLKH	750	10	Wonju	HLCW	1190	1
Seoul	HLKA	°710	100	Wollungdo	HLCU	1320	0.3
Taegu	HLKG	740	10	Yosu	HLCY	1340	1
Mokpo	HLKN	860	1	Pohang	HLCP	1420	0.25
Taejon	HLKI	880	10	Sokcho	HLCS	1570	0.3
Pusan	HLKB	890	50				

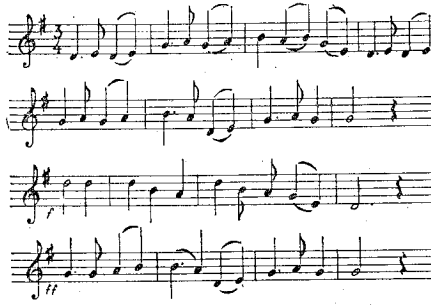
Short Waves: 1) Seoul, 2) Suwon (G.C: Seoul 126.55E/37.33N; Suwon 127.01E/37.16N).

Call	kc	m	kW	Call	kc	m	kW
1) HLK50	2510	119.50	10	1) HLK30	7190	41.72	1
1) HLK51	3910	76.73	5	2) HLK5	9640	31.12	50
1) HLK22	5975	50.21	10	2) HLK6	11925	25.17	50
2) HLK31	6015	49.88	50	2) HLK41	15125	19.83	50
2) HLK53	6035	49.71	10				

HOME SERVICE:
1st Prgr: (Korean): 20.00–17.00 on 710/2510/3910/5975/7190kc. N: 21.00, 22.00, 23.00, 01.00, 03.00, 04.00, 06.00, 07.00, 08.00, 09.00, 10.00, 12.00, 13.00, 14.00 – **2nd Prgr.** (Korean): 20.00–17.00.
FOREIGN SERVICE:
I=General Sce. II=So. Ea. Asia; III=Korea; IV= Ea. Asia/Japan; V=Europe; VI=Latin America.

English	Area/Sce	kc	Japanese	Area	kc
21.00–21.30	I	9640	09.00–10.00	IV	9640
03.00–03.30	I	15125	12.00–13.00	IV/III	9640, 970
05.00–05.30	I	9640	13.00–14.00	IV	6015
06.30–07.00	I/V	15125	15.00–15.30	III	890 (Pusan)
08.30–09.00	II/III	9640, 970	**Korean**		**kc**
10.30–11.00	II	9640	01.00–01.30	III	9640
15.30–16.00	II	15125	**Russian**		
French			22.45–23.00	IV	9640
07.00–07.30	V	15125	13.45–14.00	IV	9640
16.00–16.30	II	15125	**Spanish**		
Japanese		**kc**	03.30–04.00	VI	15125
01.30–02.00	IV	9640			

N: English: 21.00, 03.00, 05.00, 06.30, 08.30, 10.30, 15.30 – French: 07.00, 16.00. Spanish: 03.30. Chinese: 22.00, 08.00, 13.00, 15.00. Russian: 22.45, 13.45. Japanese: 01.30, 09.00, 12.00
DX PRGR (in English): Last Thurs: 03.15 on 15125kc, 05.15 on 9640kc 06.45 on 15125kc, 10.45 on 9640kc, 15.45 on 15125kc, 21.15 on 9640kc.
ANN: Korean: "KBS Seoul Choong-ang bang song kuk che il bang song im ni da HLKA" (KBS this is the first network of Seoul Central Broadc. Station, HLKA). English: "This is the Voice of Free Korea, the Korean Broadc. System in Seoul, Korea".
INT-SIG: Foreign Sce: Korean Folk Music played as Yang-geum with orchestra:



V. by QSL-card or letter – **PUB:** pamphlet, pennant free to listeners. "Korean Radio & TV" (English) yearly.

CHRISTIAN BROADCASTING SYSTEM (Non-comm, Indep).
ADDR: 91 Chongno 2-ka. Seoul. Te: 741761 – **L.P:** Dir: E. O. De Camp. Mgr: Y. H. Choi. Dir. Tec: Y. H. Park.
STATIONS:

	kc	m	kW		kc	m	kW
HLKY[1]	840	357	10	HLKP[3]	1400	214	1
HLKT[2]	1000	300	1	HLCM[5]	1400	214	1
HLCL[4]	1000	300	1	HLKY-FM	104Mc		

[1] Seoul. [2] Taegu. [3] Pusan. [4] Kwangju. [5] Iri.
HOME SCE: Korean: 20.20–15.00 – N, **Wrp:** 21.30, 21.50, 22.50, 02.50, 03.50, 04.50, 06.50, 08.50, 10.50, 12.50. **English** (for UN Forces): Sun 23.00–03.00, 12.30–13.00 (Rlg. prgr.) – ANN: "This is CBS, The Christian Broadc. System, HLKY, Seoul" – V. by letter. Recordings accepted – **F.PL:** St. at Taejon – **PUB:** Special Music prgr – **FI:** By donations from rlg. groups and individuals.

RADIO STATION HLKX (Religious, Educational)
ADDR: Box 16, Inchon. **Te:** 2-2910. **Cable:** Team Radio. – **L.P:** St. Mgr: R. H. Pence.
STATION (System: RCA): 1060kc 285m 50kW.
HOME SCE in Korean, Chinese, English, Russian:
Sat 05.30–Sun 22.00 (without break), other days 05.00–22.00.
Korean: 09.00–10.00(exc. Sat), 17.00–19.00(Sun 20.00), 22.00–23.00 (exc. Sun) – **Chinese:** 05.00–07.00(exc. Sat), 13.00–15.00(exc. Sat), 17.00–19.00(exc. Sat/Sun), 20.00–22.00(Sun only) – **English:** 05.30–13.00(Sat), 23.30–09.00(Sun), 07.00–09.00(Mon–Fri) – **Russian:** 11.00–13.00(exc. Sat), 13.00–15.00(Sat) 15.00–17.00, 19.00–21.00 (Sat)
Note: Although times are GMT, calendar days apply to Korea only.
ANN: "This is the Voice of Gospel – Team Radio HLKX, Inchon, Korea – a missionary project of the Evangelical Alliance Mission Wheaton Ill" – V. by QSL-card or letter. Recordings accepted – **PUB:** Prgr.schedule free. HLKX-Echoes (quarterly). – **FI:** By contributions and free will offerings

DONG-A BROADCASTING SYSTEM (DBS) (Comm, Private)
ADDR: 139, Sejong-no Chongno-ku, Seoul.
STATION: HLKJ (Seoul) 1230kc 10kW.
HOME SCE: 20.00–15.00. **N, Wrp:** 21.00, 22.00, 23.00, 02.00, 03.00, 04.00, 06.00, 07.00, 08.00, 10.00, 12.00, 13.00, 14.00.

HANKUK MUNHWA BROADC. CORPO. (Comm, Priv.)
ADDR: 15, Insadong chongno-ku, Seoul – **L.P:** Pres: Cho, Jung Chul. Man. Dir: Lee, Soo Hong.
STATIONS: HLKV (Seoul Key Station) 900kc 50kW – HLKU (Pusan) 1160kc 10kW – HLCT (Taegu) 810kc 1kW – HLCN (Kwangju) 820kc 1kW – HLCQ (Taejon) 580kc 1kW – HLCX (Chonju) 1140kc 5kW.
HOME SCE: 20.00–15.00. **N, Wrp:** 20.55, 21.55, 22.50, 01.55, 02.50, 03.00, 03.50, 05.55, 07.55, 08.55, 09.55, 10.55, 11.50, 12.50, 13.50 – **F.PL:** TV st. in 1967.

JONG-ANG BROADCASTING SYSTEM
ADDR: 58-9 Seosomun-dong, Seoul. Te: 6193-97 – **L.P:** Pres: Hong, Jin Ki. Chmn: Lee, Haung Bae. Exec. Dir: Kim, Kyu. Dir. Tec: Choi, Dang.
STATION: HLKC (Seoul) 640kc 20kW.
HOME SCE: 20.00–16.00. **N. Wrp:** 21.00, 22.00, 23.00, 02.00, 03.00, 04.00, 05.00, 06.00, 07.00, 08.00, 09.00, 10.00, 12.00, 13.00, 14.00.

AMERICAN FORCES KOREA NETWORK
ADDR: Headquarters U.S. Army Element, American Forces Korea Network, APO San Francisco 96301, Calif. USA. **Te:** Yongsan 2495 – **L.P:** Commanding Officer: Lt. Col. D. V. Puccio. Dep. Commanding Officer: Capt. W. K. Messner. Dir. of Prgr's: Ed. Masters. Chief of Engineering: C. I. Barr Jr.
STATIONS: 24 h

	kc	kW		kc	kW
Seoul[1]	560	5	Osan[3]	1360	1
Taegu[6]	580	1	Unchon[7]	1400	1
Munsan-Ni[4]	580	1	Wonju	1440	1
Pusan[5]	780	1	Kunsan[8]	1440	1
Chunchon	1040	1	Waegwan	1440	0.25
Kwangju	1150	0.25	Taejon	1480	1
Cheju-do	1150	0.25	Pohang	1510	0.25
Kwandae-Ri	1160	0.25	Pyangyangdo	1510	0.25
Tongduchon[2]	1200	1			

FM: Seoul[1] 102.7Mc 1kW – Hwaaksan 89.1Mc 0.05kW.
1="Vagabond", 2="Bayonet", 3="Comet", 4="Tomahawk", 5="Homesteader", 6="Kilroy", 7="Gypsy", 8="Mercury", rel. 560kc. Kunsan, Chunchon, Taejon may change frequency to 780kc.
N: Every h on the h – ANN: "This is the American Forces Korea Network". Local identification: "This is R. "Vagabond" in Seoul" etc. – V. by QSL-card. Re. to Hqs. AFKN, APO 96301, S. Francisco, Calif, USA. Rp.

VOICE OF THE UNITED NATIONS COMMAND (VUNC)
ADDR: 7th Psy. Op. Gp. APO 96248.
STATIONS: Seoul 1100kc 10kW – Kangwha Isl. 1270kc 50kW – Chorwon* 540kc 5kW.
Short Waves: (Seoul) 2635kc 113.9m 0.3kW – 3985kc 75.28m 0.3kW.

D.Prgr. in Korean, Chinese: On 540/1270/2635/3985kc: 08.00–03.00. On 1100kc: 08.00–22.00 (Korean only). V. by QSL-card – PUB: Prgr schedule yearly. * to move to Pusan and power to be 10kW. Note: Certain VUNC prgr's are relayed by KBS on 6015kc (50kW) at 06.00–07.00 and on 600kc (500kW) at 20.35–21.00.

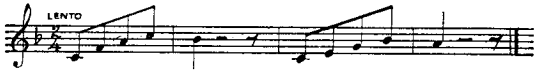
KUWAIT

L.T: GMT+3 h – Pr.L: Arabic.
KUWAIT BROADCASTING & TELEVISION SERVICE (Gov)
ADDR: P.O. Box 193, Kuwait. Te: 39411. Cable: Alirshad – L.P: Minister of Guidance & Inf: H. E. Jaber Al-Ali Al-Salem Al-Sabah. Under Secr: Sa'dun Al-Jassim. Asst. Under Secr. (Adm. & Finance): A. A. Samad. Asst. Under Secr. (Broadc): A. A. Ja'far. Chief Eng: A. E. Houty. Tec: Adviser: R. Karrer.
STATION: mw: 1/10/200kW; sw: 1/10/50kW (G.C: 47.53E/29.16N)

kc	m	kc	m	kc	m	kc	m
539	556.5	*4967.5	60.39	11940	25.12	17750	16.90
1133	264.8	**6055	49.55	°15150	19.80	21525	13.94
1345	223.2	9520	31.51				

*=throughout the year; **=Wi. only; °=Su only.

HOME SCE. in Arabic: 02.25–07.00, 09.00–21.15 – N, Wrp: 03.00, 05.00, 10.00, 13.00, 13.15 (official ann), 17.00, 19.00, 21.00 – English: 05.00–06.00, 16.00–19.00 on 1133/4967.5kc. N: 05.30, 16.15, 18.15 – ANN: "Huna I' tha't Al Kuwait" – INT-SIG: "We", an old Kuwaiti tune played on violin.



V. by QSL-card. Recordings accepted – F.PL: 100kW sw-tr, 4× 250kW sw-tr's (1967).

LAOS (Kingdom of)

L.T: GMT+7 h – Pr.L: Laotian, French.
RADIODIFFUSION NATIONALE LAO (Gov.)
ADDR: Vientiane. Te: 2457 – L.P: Dir. Gen: Bounthamaly. Mgr: Phimavong. Dir. Tec: Viengsavan. Dir. Prgr's: M. Chanthasouxad.
STATIONS: (G.C: 102.33E/17.58N) 6130kc 48.94m 1kW.
HOME SCE. in Laotian, French, Vietnamese: 23.30–02.00, 05.00–07.00, 10.00–14.30 – N: Laotian: 00.00, 05.30, 12.00. French: 00.30, 05.45, 13.15. Vietnamese: 13.00 – English Lessons: 20.45 (3 times weekly).
ANN: F: "Ici Vientiane, R.diff. Nationale Lao" – INT-SIG: Music on Khéne, instrument of Bamboo – V. by QSL-card. Rp. Recordings accepted – F.PL: 50kW (mw)+Reg. netw.

LEBANON

L.T: GMT+2 h – Pr.L: Arabic, French, English.
LEBANESE BROADCASTING STATION (Gov.)
ADDR: R. Lebanon, Ministry of Information, Beirut. Te: 251880. Cable: Radioliban – L.P: Dir. Gen: J. Zaarour. Dir. of Broadc: H. Al Hassan. Dir. Tec: J. Rouhayem. Dir. Prgr: N. Khoury. Head of Adm: K. Hage Ali.
STATIONS (G.C: 35.38E/34.08N): 989kc 10kW, others 100kW.

kc	m	kc	m	kc	m	kc	m
836	359	5980	50.17	9710	30.90	11920	25.17
989	303.3	9545	31.43	11875	25.26		

HOME SCE: Prgr. I (Arabic): On 836kc: 04.30–07.30, 09.25–22.30. On 5980kc: 04.30–07.30, 14.15–18.20. On 9545kc: 09.30–14.00 – N: 05.00, 06.00, 07.00, 10.00, 11.00, 12.00, 16.00, 17.00, 18.00, 20.00, 21.50.
Prgr. II (on 989kc): French: 05.00–06.00, 11.00–12.30, 17.00–22.00 – N: 05.30, 11.30, 12.00, 17.45, 19.55 – L.L: English: Thurs 17.15, French: Wed 17.15 – English: 15.00–17.00. N: 15.00 – Arabic, English, French: 06.00–09.30, 12.30–15.00.
FM: 98.7Mc 3kW: 12.30–22.00 (Music).

FOREIGN SCE: 18.30–20.30 on 11875kc to Africa in English, Arabic, French: 23.00–01.00 on 11920kc to So. America in Portuguese, Arabic, Spanish; 01.30–04.00 on 9710kc to No. America in English, French, Arabic, Spanish.
English: 18.30–19.00, 02.30–03.00. French: 20.00–20.30, 01.30–02.00. Portuguese: 23.00–23.30. Spanish: 00.30–01.00, 03.30–04.00. Arabic: 19.00–20.00, 23.30–00.30, 02.00–02.30 (East Coast US), 03.00–03.30 (West Coast US).
ANN: Arabic: "Houna Beyrouth al'iza'a al Loubaniat" – F: "Ici Beyrouth Radiodiff. Libanaise" – E: "This is the English prgr. of the Lebanese Broadc. System in Beirut" – Sp: "Aqui Beyrouth el Libano transmitiendo para America del Sur (or: America del Norte)" – P: "Aqui Beirut, o Libano falando ao Brasil" – V. by QSL-card and letter – INT-SIG: Guitar (Opening notes from the Lebanese National Anthem)

PUB: "Houna Beyrouth" (Ici Beyrouth) monthly, free upon request.

MACAU (Portuguese China)

L.T: GMT+8 h – Pr.L: Portuguese, Chinese, English.
EMISSORA DE RADIODIFUSÃO DE MACAU (Gov.)
ADDR: Macau. Cable: ERM. Te: 4491-25 – L.P: Dir. Gen: J. B. P. Baptista. Dir. Tec: F. A. de Macedo Pinto.
STATIONS: 1200kc 0.25kW – FM: 98.0Mc 1kW (relay 1200kc) –
HOME SCE: Portuguese: 23.00–00.30, 05.00–06.30, 12.00–15.00 – Chinese: 09.30–11.30 – ANN: "Aqui Emissora de R.difusão de Macau" – V. by letter or QSL-card. Recordings accepted.
EMISSORA VILA VERDE (Priv.-Comm.)
ADDR: R. Francisco Xavier Pereira 123, Macau. Cable: Vila. Te: 3355.
STATIONS: 1005kc 298m 0.25kW – 755kc 397m 10kW.
FM: 89.0Mc 5W (relay 735kc).
HOME SCE: Chinese: 23.00–16.00 on 735kc – Portuguese: 05.00–06.30, 12.00–16.00 on 1005kc.
ANN: P: "Aqui Emissora Vila Verde Macau" – INT-SIG: chimes – V. by letter or QSL-card.

MALAYSIA (Federation of)

L.T: GMT+7½ h – Pr.L: Malay, English.
RADIO MALAYSIA (Gov.)
ADDR: Dept. of Radio, P.O. Box 1074, Kuala Lumpur. Te: 23551. Cable: Broadcasts – L.P: Dir: Dol Ramli. Dep. Dir: Murtadza Za'ba. Contr. of Prgr's: H. Hassan, Chief. Eng: S. Gupta. Publicity Officer: F. Puerto.
STATIONS (System: Gates, RCA, NEC): M=Malay, I=Indian, C=Chinese.

	kc	kW	L		kc	kW	L
Johore Bahru	570	10	M	Kuala Trengganu	765	10	M
Kuala Lumpur	590	20	M	Johore Bahru	940	10	E
Penang	660	10	M	K. Trengganu	960	10	E
Kota Bahru	700	10	M	Malacca	1005	10	M
Ipoh	550	5	M	Penang	1040	10	C/I
Kuantan	810	10	M	Kuala Lumpur	1070	20	C/I
Kota Bahru	840	10	E	Malacca	1160	10	E
Penang	860	10	E	Ipoh	1260	5	C/I
Kuala Lumpur	885	20	E	Johore Bahru	1220	10	C/I
Ipoh	740	5	E	Malacca	1280	10	C/I

Short Waves: a) Kuala Lumpur (Kajang), b) Penang. G.C: a) 101.46E/03.01N; b) 100.19E/05.25N.

kc	m	kW	L	kc	m	kW	L
4790b	62.63	10	M	6175a	48.58	100	O
4845a	61.92	10	I	7110a	42.19	50	O
4985b	60.18	10	E	7280b	41.21	10	M
5030a	59.64	50	C	7300b	41.09	10	E
6025a	49.79	5	C	9515b	31.53	10	M
6100a	49.18	100	O	9750a	30.76	50	O
6135a	48.90	10	I	11900a	25.21	100	O

O="Voice of Malaysia".
HOME SCE. in Malay, English, Chinese, Indian:
Malay on 550/570/590/660/700/765/810/1005/4790/7280/9515kc: Mon/Wed: 22.30–06.30, 09.00–16.30; Tues/Thurs: 22.30–06.30, 07.30–16.30; Fri/Sat/Sun: 22.30–16.30. N: 00.00, 01.00, 03.30, 06.00, 09.30, 12.30, 14.30, 16.00. For Schools: Mon/Tues/Wed: 01.30–02.30, 06.30–07.30. Comm. Prgr's: 22.30–01.30, 04.30–06.30; Fri: 22.30–01.30, 06.00–08.00, 09.30–11.00, 11.45–13.00; Sat/Sun: 22.30–11.00, 11.45–13.00.
English on 740/840/860/885/940/960/1160/4985kc: Mon–Fri: 22.30–01.30, 05.30–06.30, 09.30–16.30. Sat 22.30–01.30, 06.30–16.30, Sun: 22.30–16.30; N: 23.30, 00.15, 00.30, 06.00, 09.30, 09.45, 11.00, 14.00, 16.00. For Schools: Mon/Tues/Wed: 01.30–02.30, 06.30–07.30. Comm. Prgr's: 22.30–01.30, 05.30–06.30 (Sun: 01.30–03.30, 04.30–05.30), 09.30–10.30 (Sat/Sun: 08.30–09.30), 12.30–14.30.
Chinese on 1040/1070/1220/1260/1280/5030/6025/7110kc: Mon–Fri: 22.55–01.30, 04.30–05.45, 08.30–16.30; Sat/Sun: 22.55–16.30. N: 23.00, 23.30, 24.00, 24.15, 00.30, 05.20, 05.35, 09.30, 10.15, 12.30, 13.30, 14.30, 15.20, 16.00. For Schools: Mon/Tues/Wed: 01.30–02.30, 06.30–07.30. Comm. Prgr's: 22.55–01.30, 04.30–05.45, 08.30–10.30; (Sat/Sun: 08.00–08.30) 12.30–14.30.
Indian on 1040/1070/1220/1260/1280/4845/6135kc: Mon–Fri: 22.00–00.30, 05.45–07.30, 09.00–15.30; Sat: 22.00–03.30, 05.45–15.30; Sun: 22.00–15.30. N: 22.45, 24.00, 00.15, 06.00, 09.30, 10.00, 11.30, 14.00, 15.15. For Schools: Mon/Wed/Thurs: 03.00–04.00, 07.30–08.30.

Comm. Prgr's: 22.00–22.55, 05.45–07.30 (Sat/Sun: 01.30–03.30, 07.30–08.00), 10.30–11.00, 13.30–14.30.

OVERSEAS SERVICE: ("VOICE OF MALAYSIA"):
On 6110/6175/9750/11900kc: English: 22.45–23.15, 11.15–12.15. N: 23.00, 11.30 – Mandarin: 00.30–01.00, 10.00–11.00. N: 00.31, 10.15 – Indonesian: 23.15–00.15, 09.00–11.00, 12.30–16.30. N: 23.30, 10.45, 12.45, 14.00, 15.45. Sundays only: 01.00–02.00. N: 01.30. ANN: Malay: "Ini-lah R. Malaysia". E: "This is R. Malaysia".

INT-SIG: First bar of Nat. Anthem "Negara Ku" (Chimes) – V. by letter. Recordings accepted – F.PL: 1 × 250kW sw tr for Overseas Sce at Kajang – PUB: Prgr. sched. for Home Sce. (Malay, English, Mandarin, Tamil) and Overseas Sce. (Indonesian, Mandarin, English) weekly – FI: By state and adv – ALF: $ 12,-.

BBC FAR EASTERN STATION

ADDR: P.O. Box 416, Johore Bahru, Malaysia.
STATIONS (G.C: 103.48E/01.32N) (Tr. located at Tebrau):

kc	m	kc	m	kc	m	kc	m
3915	76.64	9560	31.38	11890	25.23	17880	16.78
6010	49.92	9570	31.35	11920	25.17	21485	13.96
6080	49.34	9580	31.32	11930	25.15	21610	13.88
6110	49.10	9690	30.96	11955	25.09	21650	13.86
7110	42.19	9725	30.85	15260	19.66	21655	13.86
7120	42.13	11725	25.59	15310	19.60	21720	13.81
7135	42.05	11750	25.53	15350	19.54	21740	13.80
7150	41.96	11820	25.38	15435	19.44	25650	11.70
7235	41.47	11830	25.36	17755	16.90	25850	11.61
7240	41.44	11880	25.25	17870	16.79		

RELAYS OF BBC WORLD SERVICE
No. & Ea. China, Korea & Japan:
23.00–23.15 on 7120, 9725, 11955kc; 00.00–00.30 on 11890, 15435kc; 09.00–13.30 on 17880kc; 10.45–13.30 on 15435kc; 09.00–09.45 on 11955kc.
So. China/Hong Kong/Vietnam/Laos/Cambodia:
23.00–23.15 on 3915, 6010, 7120, 9725, 11955kc; 00.00–00.30 on 11890, 15435kc; 00.00–00.15 on 7120, 9725, 11955, 15435kc; 09.00–09.45 on 9725, 11955kc; 09.00–13.30 on 17880kc; 10.45–13.30 on 15435kc; 11.30–16.50* on 11750kc; 13.00–16.50* on 7120kc; 14.00–16.50* on 6110kc; 14.15–16.50* on 9725kc (*=Sat 17.20).
Indonesia:
23.00–23.15 on 3915, 6010, 6080, 7120, 9725kc; 00.00–00.30 on 9570kc; 09.00–11.30 on 11750kc; 09.00–09.45 on 7235, 9725kc; 11.00–11.15 on 7235kc.
Burma/Thailand:
23.00–23.15 on 3915, 6010, 7120, 9725kc; 00.00–00.15 on 7120, 9725, 11955kc; 09.00–13.30 on 17880kc; 11.30–16.50* on 11750kc; 13.00–16.50* on 7120kc; 14.00–16.50* on 6110, 9580kc; 14.15–16.50* on 9725kc.
India, Pakistan, Ceylon: 11.30–16.50* on 11750kc; 13.45–16.50* on 9580kc (*=Sat 17.20) – Australia: 09.00–11.30 on 11750kc; 13.00–13.15 on 11955kc.

ENGLISH BY RADIO
23.30–23.45 on 3915/6080/7120/9725kc; 00.30–00.45 on 7120/9570/9725/11890/11955/15435kc; 09.45–10.00 on 7235/9725/11955kc; 13.45–14.00 on 6110kc; 16.15–16.30 on 11955kc.

RELAYS OF ASIAN SERVICE

Bengali	m.b.	Japanese	m.b.
15.45–16.15	25	22.00–22.15	49, 41, 31, 25
		11.00–11.30	25
Burmese		Sinhala	
00.15–00.30	41, 31, 25	15.45–16.15	25
13.45–14.15	31, 25	Tamil	
Chinese		15.45–16.15	25
22.15–22.45	75, 49, 41, 31, 25	Thai	
10.00–10.30	41, 31, 25	23.45–24.00	41, 31, 25
12.00–13.00	41, 31, 25	13.15–13.45	31, 25
Hindi		Urdu	
15.00–15.45	25	14.15–15.00	25
Indonesian		Vietnamese	
23.15–23.30	75, 49, 41, 31	22.45–23.00	75, 49, 41, 31, 25
10.30–11.00	41, 31, 25	11.30–12.00	41, 31, 25

V: The BBC welcomes reception reports, which are acknowledged with a special card. Re. to C.E.X.B. British Broadcasting Corporation, Bush House, London W.C. 2. Recordings accepted.

R. RAAF BUTTERWORTH (a voluntary, non-profit organization) – ADDR: RAAF Base, Butterworth – L.P: St. Mgr: Flt. Lt. R. A. Bean. Dir. Tec: F. Sgt. G. Kennewell.
STATION: 1445kc 0.5kW – D.PRGR. in English: Mon–Fri 22.30–05.30, 09.00–12.30; Sat 01.00–16.30; Sun 05.00–15.00. N: 23.00**(W exc. Mon), 11.00*(W), 11.10**(Mon–Fri) – *R. Malaysia, **Australian-N – ANN: "This is the Voice of the Royal Australian Air Force in Malaysia, Radio RAAF Butterworth" – V. not wanted and not answered.

REDIFFUSION (MALAYA) LTD.

Kuala Lumpur: P.O. Box 570. Te: 81941. Cable: Rediffuse – L.P: Man. Dir: G. H. Oldridge. Gen. Mgr: P. J. M. Patten – Two simultaneous wired broadc. networks. Originating own prgr's and rel. "R. Malaysia", B.B.C. etc. Penang: P.O. Box 559. Te: 61761. Cable: Rediffuse. Gen. Mgr: L. H. Adams. Two simultaneous wired broadc. networks. Originating own prgr's and rel. "R. Malaysia", B.B.C. etc. Ipoh: 127 Jalan Pasir Puteh, Ipoh, Perak. Te: 72173. St. Mgr: P. J. M. Patten. Two simultaneous wired broadc. networks. Originating own prgr's and relaying Rediff. Kuala Lumpur, R. Malaysia, B.B.C. etc.
FI: By subscription charges and adv.

MALDIVE ISLANDS

L.T: GMT+5 ½ h – Pr.L: Sinhalese, Tamil, English.

MALDIVE ISLANDS BROADCASTING SCE. (Gov.)

ADDR: Male Sinico Radio, Male Island.
STATIONS: 3223kc 93.09m – 7150kc 41.96m – 9552kc 31.41m
HOME SCE. in Sinhalese, Hindi, Tamil, English (test tr's):
01.30–04.00 on 7150kc, 07.00–09.30 on 9552kc, 12.30–17.30 on 3223kc.
N. in English: 03.00, 09.00, 17.00. (All details reported by listeners).

MONGOLIA (Peoples Rep)

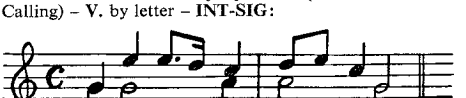
L.T: GMT+8 h – Pr.L: Mongolian.

ULAN BATOR RADIO (Gov.)

ADDR: CPO Box 365 Ulan Bator. Cable: Mongolian Radio. L.P: Dir. of Foreign Rel: B. Dagva.
STATIONS: Ulan Bator. *Tsanagur. **Ulgei.

kc	m	kW	kc	m	kW	kc	m	kW
209	1435	150	4085	73.44	50	7365	40.76	50
227	1322	150	4165	72.03	50	9540	31.45	50
3215	93.30	60	5332	56.27	50	10885	27.60	25
*3222	93.10	5	5960	50.34	50	11850	25.32	50
**3972	75.51	20	6383	47.00	50			
4070	73.73	25	7260	41.32	50			

HOME SCE: 1st Prgr: 22.55–15.05 on 227/5332.5kc; 22.55–02.00 & 09.00–15.15 on 4165kc; 22.55–12.00 on 10885kc; 02.00–07.05 on 7260 kc; 12.00–15.05 on 4085kc. Russian: Mon 08.20–08.50, Fri 08.30–09.00. 2nd Prgr: Mon/Tues/Fri/09.00–14.05; Wed/Thurs/Sun 09.00–13.00 on 6383/5960kc.
Russian: Mon–Fri 10.40–11.10.
FOREIGN SCE: English (to Far East & Ea. Asia): 21.30–22.30 (Mon, Tues, Thurs, Fri), 14.20–15.20 (Tues, Wed, Fri, Sat) on 9540/11850kc. N: 21.30, 14.20.
Chinese: 13.00–14.00 (Wed, Sat) on 6383/7365kc – Mongolian (to Asia): 13.00–14.00 (Thurs, Sun) on 6383/7365kc – Kazakh (to Sinkiang): 12.00 (Wed, Sun) on 6383/7365kc.
Recordings accepted. Rp. welcome, but not required.
ANN: "Ankhararai Ulanbatras jarsj baina" (Attention: This is Ulan Bator Calling) – V. by letter – INT-SIG:



NEPAL

L.T: GMT+5.40 h – Pr.L: Nepali.

RADIO NEPAL (Gov.)

ADDR: Dept. of Broadc, His Majesty's Go. of Nepal, Kathmandu. Te: 11569 – L.P: Dir: P. M. Singh, Superintending Eng: K. B. Khatry.
STATIONS: (G.C: 85.20E/27.45N):
9NBM 1500kc 200.0m 0.25kW
9NB7 4600kc 65.22m 5kW – 7105kc 42.22m 5kW
HOME SCE: 02.20–04.20, 07.20–09.20 (sw. only), 13.20–15.20. N. in English: 03.00, 15.00. N. in Nepali: 02.50, 14.50.
EXTERNAL SCE: Sat 09.35–10.20 on 7105kc for Nepalese abroad.
ANN: Nepali: "Yo R. Nepal Ho". Newari: "Tho R. Nepal Kha". English: "This is R. Nepal" – INT-SIG: Instruments used: Conch-Shell, Violin, Piano and Jal-Tarang – V. by QSL-card. Rp – F.PL: 100kW to start operation early 1967. – AD: between 07.20–09.20.

PAKISTAN

L.T: We. Pakistan: GMT+5 h. Ea. Pakistan: GMT+6 h – Pr.L: Urdu, Bengali.

RADIO PAKISTAN (Gov.)

ADDR & L.P: 1st Addr: Ferozsons Bldg, Hardinge Rd, Rawalpindi. L.P: Dir. Gen: S. M. Husain. Dept. Officer on Special Duty: K. G. Ali, Dir Listeners Research: N. Ahmed. Dir. Educ. Broadc: M. Qureshi. Dir. Adm: A. A. Hanafi.
2nd Addr: 71, Garden Rd, Karachi. Te: 71771 – L.P: Joint Dir. Gen: A. Qutb. Dep. Dir. Gen. (II) S. A. Hafeez, Dep. Chief Eng. (Planning): M. G. Baig. Dir. Prgr Planning: M. Naseem-uz-Zafar. Dir. Liaison: S. M. Tahir.

3rd Addr: Block No. 73, Pakistan Secretariat, Karachi – **L.P:** Dep. Chief Eng (I): S. Shah. Dep. Chief Eng (II): M. A. Rehman. Maintenance Eng: S. Hasan. Installation Eng: Irfanullah.
4th Addr: Broadcasting House, Bunder Rd, Karachi – **L.P:** Dir. N: K. S. H. Ansari. Dir. External Sce's: M. Iqbal. Dir. Transcription Sce's: S. A. Gilani. Dir. Monitoring: S. Haq.

STATIONS:

Medium Waves:	kc	m	kW		kc	m	kW
Peshawar	580	517.2	10	Rangpur	1050	285.7	10
Lahore I	630	476.2	100	Lahore II	1090	285.7	10
Dacca II	690	435.1	100	Sylhet	1140	263.2	2
Quetta	750	400.0	10	Rawalpindi	1150	260.8	10
Karachi I	830	361.4	10	Dacca I	1170	256.4	5
Chittagong	870	344.8	10	Rajshahi	1080	277.7	10
Hyderabad	1010	297.0	10				

Short Waves: Karachi: 10/50kW (G.C: 67.00E/24.35N).

kc	m	kc	m	kc	m	kc	m
2420	124.00	7200	41.67	9810	30.58	15275	19.64
3395	88.37	7225	41.52	11650	25.75	15285	19.63
3915	76.63	7240	41.44	11672	25.71	15315	19.59
3945	76.05	7255	41.35	11725	25.59	15325	19.58
3955	75.85	7275	41.24	11730	25.58	15335	19.56
4807	62.41	7280	41.21	11740	25.55	15360	19.53
4895	61.29	7290	41.15	11770	25.49	15700	19.11
4910	61.10	7295	41.12	11795	25.43	17710	16.94
4935	60.79	9484	31.63	11800	25.42	17715	16.93
4980	60.25	9545	31.43	11810	25.40	17720	16.93
5980	50.17	9560	31.38	11845	25.33	17745	16.91
5985	50.13	9595	31.27	11875	25.26	17750	16.90
5990	50.08	9600	31.25	11885	25.24	17755	16.90
6035	49.71	9614	31.20	11910	25.19	17760	16.89
6070	49.42	9630	31.15	11914	25.19	17770	16.88
6075	49.38	9640	31.12	11920	25.17	17835	16.82
6235	48.12	9645	31.10	15135	19.82	17950	16.71
6245	48.04	9695	30.94	15160	19.79	21570	13.91
7010	42.80	9705	30.91	15195	19.74	21580	13.90
7130	42.08	9737	30.81	15205	19.73	21590	13.90
7150	41.96	9740	30.80	15255	19.67	21630	13.87
7160	41.90	9750	30.77	15270	19.63	21690	13.83
7170	41.84	9755	30.76				

Dacca 7.5/10/100kW (G.C: 90.25E/23.45N).

kc	m	kc	m	kc	m	kc	m
2350	127.66	6070	49.42	9605	31.23	15265	19.66
3325	90.23	6075	49.38	9614	31.20	15270	19.65
3950	75.95	6090	49.26	9615	31.20	15285	19.63
3955	75.86	6112	49.08	9645	31.10	15335	19.56
3965	75.66	6120	49.02	9690	30.96	15550	19.29
3985	75.28	7020	42.72	9695	30.94	17630	17.02
4790	62.62	7080	42.37	11610	25.67	17640	17.00
4807	62.41	7140	42.01	11725	25.59	17710	16.94
4810	62.37	7150	41.90	11730	25.58	17720	16.93
5035	59.58	7155	41.92	11865	25.28	17730	16.92
5970	50.25	7225	41.52	11885	25.24	17835	16.82
5980	50.17	7250	41.38	11890	25.23	17890	16.77
5995	50.04	7263	41.30	15145	19.81	21465	13.98
6015	49.88	7278	41.22	15155	19.80	21630	13.87
6035	49.71	7284	41.19	15160	19.79	21685	13.83

Lahore: 1kW (G.C: 74.20E/31.35N).

kc	m	kc	m	kc	m	kc	m
2400	125.00	4785	62.70	6075	49.38	9645	31.10
3335	89.96	4807	62.41	6138	48.88	11800	25.42
3395	88.35	6025	49.79	7225	41.52	11840	25.34
3915	76.63	6030	49.75	7270	41.27		
3950	75.95	6065	49.46	7284	41.19		

Peshawar: 10kw (G.C: 71.30E/34.00N).

kc	m	kc	m
2320	129.31	4915	61.04
3241	92.56	5990	50.08
3935	76.24	6120	49.02
3940	76.15	7130	42.07
3965	75.67	9600	31.25
4910	61.10		

Rawalpindi: 10kW (G.C: 73.00E/33.30E).

kc	m	kc	m
2460	122.00	6015	49.88
3259	92.53	7110	42.19
3945	76.05	9730	30.83
4895	61.28	9755	30.75

Quetta: 10kW (G.C: 67.00E/30.15N).

kc	m	kc	m	kc	m	kc	m
3270	91.74	4915	61.04	5980	50.17	7110	42.19
3870	77.51	5970	50.25	5985	50.16	7140	42.02
3915	76.64						

Islamabad: 2×100kW tr's (G.C: 73.00/33.30N).

kc	m	kc	m	kc	m	kc	m
5035	59.58	9630	31.15	15160	19.79	17950	16.71
7200	41.67	9760	30.74	15275	19.64	21460	13.98
9545	31.43	11845	25.33	17890	16.77	21570	13.91
9560	31.38	15145	19.81				

RADIO MALAYSIA

Federal House P.O. BOX 1074 - Kuala Lumpur

Telephone: 23551/5

Cables: Broadcasts Kuala Lumpur

Ini-Lah SUARA MALAYSIA!

THE VOICE OF MALAYSIA

informs - entertains - educates

OVERSEAS SERVICE

49 metres (6100, 6175 kc)
25 metres (11900 kc)

Language	GMT	kc	News
Morning:			
English	22.45–23.15	6105, 6175	23.00
		11900	
Indonesian	23.15–00.15	6100, 6175	23.30
Mandarin	00.30–01.00	11900	00.31
Indonesian	01.00–02.00 (Sun)		01.30
Afternoon:			
Indonesian	09.00–11.00	6100, 6175	09.01
			10.45
Mandarin	10.00–11.00	11900	10.15
English	11.15–12.15	6100, 6175	11.30
		11900	
Evening:			
Indonesian	12.30–16.30	6110, 6175	12 45
		11900	14.00
			15.45

MEDIUM WAVE PROGRAMMES:
Karachi (Urdu, English, Bengali): 01.30–03.30 (Sun 01.30–10.30), 06.00–10.30, 11.30–19.00. **Lahore** (Urdu, English, Punjabi): 01.30–03.30 (Sun 01.30–05.00), 06.00–08.30; 11.30–19.00. **Rawalpindi** (Urdu, English, Potohari): 01.30–03.30 (Sun 01.30–05.30), 06.00–08.30; 10.45–17.30. **Peshawar** (Urdu, English, Pushto): 01.30–03.30 (Fri & Sun 01.30–04.00), 06.00–08.30; 11.20–17.30. **Hyderabad** (Urdu, English, Sindhi): 01.30–03.30 (Sun 01.30–05.30), 06.00–08.30, 11.30–17.30. **Quetta** (Urdu, Baluchi, Pushto, English): 01.30–03.30 (Sun 01.30–04.30), 06.00–08.30, 11.30–17.30. **Dacca** (Bengali, Urdu, English): 01.00–03.00 (Sun, Fri 01.00–03.30), 06.00–09.00, 10.30–18.00. **Chittagong**: (Bengali, Urdu, English): 01.00–03.00 (Sun 01.00–03.30), 06.00–09.00, 10.30–17.10. **Rajshahi** (Bengali, Urdu, English): 01.00–03.00 (Sun, Fri 01.00–03.30), 06.00–09.00, 11.00–17.10. **Sylhet**: (Bengali, Urdu, English): Relays Dacca from 10.30–17.10.

Abbreviations: K=Karachi, L=Lahore, R=Rawalpindi, P=Peshawar, Q=Quetta, D=Dacca, H=Hyderabad, Ra=Rajshahi, C=Chittagong, S=Sylhet.
Nat. Music is broadc. daily from each st. of R. Pakistan on the chunks other than those reserved for fixed point items, spoken word items and N.

NEWS: English (Nat): 02.10–02.20, 15.00–15.15 K,H,L,R,P,Q,D,C, Ra (at 15.00–15.15 also S).
Urdu (Nat): 02.00–02.10, 06.05–06.10, 08.00–08.10, 12.00–12.10, 14.45–15.00, 17.05–17.10 K,H,L,R,P,Q,D,C,Ra (12.00–12.10, 14.45–15.00, 17.05–17.10 also S). **Urdu (Local)**: 13.15–13.20 K, 14.05–14.10 H, 12.20–12.25 L,R, 12.30–12.35 P, 12.55–13.00 Q, D, S, 13.15–13.20, C, 11.35–11.40 Ra.

Bengali (Nat): 01.45–02.00, 06.00–06.05, 08.10–08.20, 12.00–12.20, 17.00–17.05 K,H,L,R,P,Q,D,C,Ra (14.00–14.15 K,D,C,Ra,S).
Bengali (Local): 12.50–12.55 D,S; 13.10–13.15 C; 11.30–11.35 Ra.
Pushto (Nat): 02.50–03.00 P,Q, 08.20–08.30 P, 12.20–12.30 P,Q.
Pushto (Local): 13.45–13.55 P.
Sindhi: 02.50, 12.20 (14.00 local) H – **Baluchi**: 03.00, 13.00 (13.10 local) Q – **Kashmiri**: 12.35 K.

SHORT WAVE PROGRAMMES:
Karachi to We. Pakistan: 01.30–03.30 on 4980/6070kc (Sun 03.45–07.00 on 9645/7275kc), 06.00–10.30 on 9645/11885kc, 12.00–12.30 on 9645/11885kc, 14.15–15.45 on 6235/7010kc, 17.00–17.10 on 5985/7010kc.

Kashmiri Prgr: 12.35–13.20 on 7010/9750kc – **Baluchi Prgr**: 13.00–13.10 on 7130/9645kc.

01.30–01.45	Rlg. Prgr.	08.00–08.10	N. in Urdu
01.45–02.00	N. in Bengali	08.10–08.20	N. in Bengali
02.00–02.10	N. in Urdu	08.20–08.30	N. in Pushto
02.10–02.20	**N. in English**	08.30–10.30	Comm. Sce.
02.20–02.30	Rlg. Prgr.	12.00–12.10	N. in Urdu
02.30–02.35	Nat. Prgr.	12.10–12.20	N. in Bengali
02.50–03.00	N. in Pushto	12.20–12.30	N. in Pushto
03.00–03.10	N. in Baluchi	14.15–14.45	National Hookup
03.10–03.30	Karachi Prgr.	14.45–15.00	N. in Urdu
03.45–06.00	Karachi Prgr. (S)	15.00–15.15	**N. in English**
06.00–06.05	N. in Bengali	15.15–15.20	Comm. in Urdu
06.05–06.10	N. in Urdu	15.20–15.45	National Hookup
06.10–07.00	Karachi Prgr.	17.00–17.05	N. in Bengali
07.00–08.00	Comm. Sce.	17.05–17.10	N. in Urdu

Karachi to Ea. Pakistan: 01.30–03.30 on 11885/15205kc, (Sun 04.15–07.00 on 17950/21590kc), 06.00–08.20 on 17950/21590kc, 12.00–12.20 on 17950/21590kc, 14.00–15.45 on 11672/15460kc, 17.00–17.10 on 9810/11672kc.

01.30–01.45	Rlg. Prgr	08.10–08.20	N. in Bengali
01.45–02.00	N. in Bengali	12.00–12.10	N. in Urdu
02.00–02.10	N. in Urdu	12.10–12.20	N. in Bengali
02.10–02.20	**N. in English**	14.00–14.15	N. in Bengali
02.20–02.35	Rlg. Prgr	14.15–14.45	National Hookup
02.35–03.30	Karachi Prgr	14.45–15.00	N. in Urdu
04.15–07.00	Karachi Prgr (S)	15.00–15.15	**N. in English**
06.00–06.05	N. in Bengali	15.15–15.20	Comm. in Bengali
06.05–06.10	N. in Urdu	15.20–15.45	National Hookup
06.10–07.00	Karachi Prgr	17.00–17.05	N. in Bengali
07.00–08.00	Comm. Sce.	17.05–17.10	N. in Urdu
08.00–08.10	N. in Urdu		

ZONAL SERVICES:

Lahore	kc
01.30–03.30	3950
06.30–08.30	7225
12.00–13.45	4807
14.00–17.30	3950
Dacca	**kc**
01.00–03.00	4810
07.00–09.00	7250
11.00–13.00	7250
13.15–16.30	4810

Dacca to We. Pakistan	kc
01.00–03.00	9690
07.00–09.00	21685
11.00–13.30	17630
13.45–16.30	11865
Rawalpindi	**kc**
10.45–11.45	6120

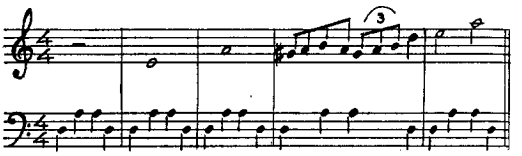
Peshawar	kc
01.30–03.30	3940
07.00–08.30	7130
12.00–12.45	4910
13.00–17.30	3940
Quetta	**kc**
01.30–03.30	4915
07.00–08.30	7110
12.00–14.00	7140
14.15–17.30	3915

EXTERNAL SERVICE:

Times	Service	kc	Language
00.30–01.15	So. Ea. Asia	11885/15205	English
03.45–05.00	So. Ea. Africa	17745/21590	*
08.30–08.45	GOS Far East	17950/21590	English
08.45–09.30	Indonesian	17950/21590	**
09.45–10.30	Burmese	17950/21590	Burmese
10.45–11.45	So. Asia	9645/11875	***
13.35–13.50	GOS (Mid. East)	17950/11590 11875/15100	English
16.00–16.45	Afghan/Persian	5985/7010	Afghan/Persian/ Turki
16.00–16.45	Iranian	11885/9645	Persian
17.30–18.30	Arabic	15205/17750	Arabic
18.45–19.30	Turkish	11672/15205	English/ Turkish
19.45–20.30	U.K.	9640/11672	English

* Urdu, Gujrati, English, Swahili; ** Indonesian, English; *** Hindustani, English, Tamil.

N. in English: 00.45, 04.30, 08.30, 09.00, 11.15, 13.35, 19.00, 20.00. **ANN**: E: "This is R. Pakistan, Calling listeners in (name of target country)" – **INT-SIG**:



V. by QSL-card – PUB: Monthly "Pakistan Calling" in English; Urdu, Bengali (fortnightly). Monthly in Arabic, Persian, Burmese.

PHILIPPINES

L.T: GMT+8 h – **Pr.L**: English, Tagalog, Ilocano, Visayan.
RADIO CONTROL OFFICE, Dept. of Public Work and Communications, Manila – **L.P**: Dir: B. C. David.
Stations: Educ. and Gov: 3), 6), 31). **Rlg**: 1), 4), 14). Other st's priv. comm. 2) is Gov. owned, but broadc. comm. prgr's.

STATIONS: Location Manila exc. where indicated – * inactive.

Call	kc	m	kW	Name & h of tr.
1) DYB4	*3277	91.55	0.3	Nat. Council of Churches Broadc. Netw., Dumaguete City: 21.00–14.00
2) DUB4	3286	91.29	5	Philippine Broadc. Sce: 09.30–11.30
3) DZCA	3305	90.77	1	Nat. Civil Defense Adm: 08.00–11.00
4) DZB2	3345	89.68	2	Far East Broadc. Co: 21.00–15.00
5) DXB3	3945	76.05	0.5	Notre Dame Broadc. Corp, Cotabato City: 22.00–14.00
6) DZB6	4945	60.67	0.5	Nat. Teachers College: W 09.30–11.00, Sun 01.00–03.00
3) DZCA	5970	50.25	1	Nat. Civil Defense Adm: 08.00–11.00
4) DZH6	6030	49.75	2	Far East Broadc. Co: 21.30–17.30
4) –	6050	49.59	40	Far East Broadc. Co: 22.00–22.45
1) DYH4	6055	49.55	0.25	Nat. Council of Churches Broadc. Netw, Dumaguete City: 21.00–14.00
7) DZI7	6080	49.34	0.25	Voice of Manila: 21.00–16.00
4) DZF4	6120	49.02	50	Far East Broadc. Co: 21.30–23.15
2) DUH2	6170	48.62	10	Philipp. Broadc. Sce: 09.00–11.30
8) DUH9	7160	41.90	1	Univ. of the Philippines, Quezon City: 09.00–13.00
4) DZI9	7230	41.49	3	Far East Broadc. Co: 21.30–23.15, 13.30–17.30
9) DXH2	7280	41.21	0.5	Mindanao Broadc. System, Davao City: 23.00–08.00
4) DZH7	9505	31.56	50	Far East Broadc. Co: 22.30–23.45, 12.45–16.30
1) DYH5	9630	31.15	50	SEARV, Dumaguete City
10)DZRV	*9690	30.96	0.25	R. Veritas, Manila:
4) DZF5	9715	30.89	10/2	Far East Broadc. Co: 21.30–23.15, 08.30–17.30
4) DZF6	11740	25.55	2	Far East Broadc. Co: 21.30–23.45
4) DZH8	11855	25.31	50	Far East Broadc. Co: 23.30–00.30, 09.00(Sun 08.30)–12.45, 16.30–17.30
1) DYH6	11875	25.26	50	SEARV, Dumaguete City
4) –	11890	25.23	2	Far East Broadc. Co: 08.30–17.30
4) DZF2	11920	25.17	40	Far East Broadc. Co: 03.00–05.30, 10.30–13.45
4) DZF7	15230	19.70	2/10	Far East Broadc. Co: 09.00–14.00
4) DZH9	15300	19.60	2/10	Far East Broadc. Co: 22.00–05.30
4) –	15365	19.52	10	Far East Broadc. Co: 01.00–03.00
4) DZF3	15385	19.50	50/3	Far East Broadc. Co: 23.30–03.00

Call	kc	m	kW	Name & h of tr.
4) –	15390	19.49	50	Far East Broadc. Co: 03.00–06.30 (Sun only)
1) DYH7	15420	19.46	50	SEARV, Dumaguete City
4) DZF8	15440	19.43	10/3	Far East Broadc. Co: 08.30–13.00
1) DYH8	17715	16.93	50	SEARV, Dumaguete City
4) DZI6	17810	16.84	2	Far East Broadc. Co: W 22.00–12.00, Sun 03.00–06.30
1) DYH9	21470	13.97	5 (	SEARV, Dumaguete City

Medium Waves: °=also on Short Wave

	Call	kc	kW		Call	kc	kW		Call	kc	kW
11)	DZXR	530	0.5	9)	DXMM	810	1	21)	DYOR	1130	1
12)	DZYZ	540	1	7c)	DYBU	820	1	16)	DZHP	1130	10
3)	DZCA	550	1	22)	DZQL	830	5	29)	DYRD	1150	1
3)	DYCI	550	1	1)	DYSR	°840	10	22)	DZMY	1160	5
13)	DZCI	560	1	7d)	DZGE	850	5	9)	DXMV	°1160	1
14)	DYCB	570	10	9)	DXMU	850	1	21)	DYLL	1170	1
15)	DZBB	580	10	10)	DZRV	°860	50	40)	DZWJ	1170	5
16)	DXDC	590	1	21)	DYOG	860	1	14)	DXLD	1180	1
7c)	DYRC	600	5	22)	DYQL	870	1	40)	DZSE	1180	1
17)	DZAX	600	0.5	16)	DXVM	870	1	2)	DZRM	1190	5
18)	DZVV	600	1	44)	DZBT	870	1	29)	DYRH	1200	1
12)	DXYZ	610	1	5)	DXMS	°880	5	41)	DZLB	12100	0.25
14)	DZAQ	620	50	27)	DZRC	890	1	42)	DYRV	1220	1
17)	DZRL	630	1	15)	DZXX	890	1	31)	DZSA	1230	0.5
19)	DYAG	630	5	9)	DXUM	900	1	43)	DZAL	1230	1
16)	DXBC	630	1	32)	DZAD	900	1	44)	DZLT	1240	5
14)	DXAW	640	10	16)	DYHP	900	1	45)	DYVM	1260	5
7a)	DZRH	°650	10	22)	DXLI	910	1	18)	DZYE	1270	5
20)	DZXI	660	1	21)	DYHF	910	1	21)	DYRL	1280	5
21)	DYBC	660	1	9)	DXMX	910	1	17)	DZBJ	1280	5
11)	DZYB	670	1	33)	DXMT	930	10	27)	DZEB	1290	1
22)	DYPL	670	1	34)	DZTD	940	5	11)	DZYQ	1290	1
4)	DZAS	°680	10	1)	DYCR	°940	1	40)	DZNN	1300	0.5
23)	DXJM	680	1	9)	DXRZ	950	1	15)	DZFF	1310	1
14)	DZXN	690	1	9)	DXMO	950	1	21)	DYML	1310	1
2)	DXLM	690	0.5	22)	DZXL	960	50	21)	DYRX	1320	1
17)	DXDX	690	1	9)	DXMN	970	1	46)	DYDB	1330	1
17)	DZTG	690	1	7f)	DYMB	970	1	47)	DZYG	1330	1
18)	DZLU	700	1	11)	DZXM	980	0.5	14)	DZBC	1340	5
2)	DZFM	°710	10	12)	DXRB	980	1	11)	DZYR	1350	1
16)	DXIC	720	1	19)	DXGE	980	0.5	11)	DZYS	1350	1
12)	DZYI	720	1	35)	DXWB	990	0.5	2)	DXRP	1350	1
24)	DZGB	720	1	29)	DYRP	990	1	21)	DYRL	1360	1
25)	DYBR	730	1	14)	DZMM	1000	10	11)	DZXQ	1360	0.5
14)	DZRD	730	1	30)	DXXU	1000	10	48)	DZRA	1360	1
5)	DXND	°730	1	22)	DXJW	1010	5	17)	DZBS	1370	0.6
9)	DXMC	°740	5	30)	DZSJ	1010	1	49)	DYVR	1370	2.5
26)	DZBM	740	1	36)	DZFA	1010	1	34)	DZTM	1380	10
27)	DZCV	740	1	18)	DZWX	1020	1	50)	DXRM	1390	1
22)	DYCU	750	1	4)	DZFE	°1030	1	11)	DZYA	1400	0.5
14)	DZRB	750	5	7h)	DYMS	1040	1	22)	DYXL	1400	5
27)	DZCV	750	1	14)	DZRI	1040	5	8)	DZUP	°1410	5
7b)	DZMB	°760	5	18)	DZNC	1040	5	2)	DYMR	1410	5
12)	DXRI	760	1	21)	DXLL	1050	2.5	29)	DYRS	1420	1
28)	DZJC	770	1	2)	DZRB	1050	1	26)	DZLM	1430	1
9)	DXMZ	770	1	37)	DYSA	1050	1	15)	DYOO	1440	1
29)	DYPR	770	1	4)	DXKI	1060	1	51)	DZBU	1460	10
30)	DYRR	770	1	18)	DZVR	1060	5	31)	DZJS	14801	0.5
31)	DZAB	780	1	34)	DZWS	1070	10	21)	DZGH	1480	1
32)	DZAA	780	1	21)	DYWX	1070	1	21)	DYKR	1480	1
16)	DXCC	780	10	38)	DXVZ	1080	1	27)	DXOG	1490	1
7e)	DYVL	790	1	39)	DYMX	1080	1	2)	DZAP	1500	0.5
32)	DZXE	790	1	9)	DXCM	1090	1	2)	DZEG	1510	1
7d)	DZPI	800	5	18)	DYVP	1090	1	15)	DYBB	1520	1
18)	DYFN	800	5	34)	DZMT	1100	10	52)	DYAV	1550	0.5
9)	DXMN	810	1	9)	DXRC	1110	1	53)	DZFU	1580	0.5
12)	DZSP	810	1	29)	DYRM	1120	1	54)	DYDR	1590	1
9)	DXMI	810	1	27)	DZXE	1120	1	1)	DZCH	1600	10

Short Waves:

1) **National Council of Churches Broadcasting Network**
Addr: DYSR (Head Office of Netw), Dumaguete City; DZCH, P.O. Box 4148, Manila – **L.P:** Dir. Gen: G. Ralph Milton (Assoc. Dir. for Radio & TV, Mass Media Commission), St. Mgr. & Dir. Tec. (DYSR/DYCR): B. Magdamo. Ag. Mgr (DZCH): W. Matthews. – **D.Prgr:** On DYSR/DYH4: 21.00–14.00. N. in English: 22.45, 04.15(Sun), 12.00. N. in Visayan: 22.00, 10.00; On DZCH: 21.00–14.00.
Ann: "This is the N.C.C.B.N. the National Council of Churches Broadc. Network. You are listening to DYSR & DYH4 in Dumaguete (or DZCH & DZCH-FM) in Manila" – **V.** by letter & prgr.schedule. Recordings accepted.

1) **South East Asia Radio Voice (SEARV) (Rlg).**
Addr: Dumaguete City, Philippines. **Cable:** "Care DYSR" – **Studios:** 10 Salemba, Djakarta IV/3, Indonesia; 82nd Street, Mandalay, Burma; 14 Pramuan, Bangkok, Thailand; 191 Prince Edward Road, Kowloon, Hongkong; 116, Sec 1, Taichung-Kong Rd, Taichung, Taiwan – **L.P:** Exec. Dir: C. Bernardez. Dir's: S. Lader (Burma), J. Haurissa (Indonesia), J. R. Sams (Thailand), T. W. Lung (Hongkong). **Stations:** Dumaguete City: see above.
D.Prgr's: Tests scheduled to start March 1967 barring unforseen delays. **V.** by QSL-card. Reports to be sent to C. Bernardez, SEARV, Dumaguete City, Philippines, Recordings accepted. – **Fi:** Operations are underwritten by protestant churches of the National Council of Churches in the US and by special gifts from the churches of the National Councils in the participating Asian Countries.

2) 5th Floor, GSIS Bldg. Manila. **Te:** 3-24-15. **Cable:** Philcast – **Fi:** By State and adv – **L.P:** Gen. Mgr: F. Trinidad. Adm. Officer: P. Prado. Head Tr's Dept: J. Dy. Head Studio Dept: L. Quintos. Head Prgr. Dept: M. Aguila – **D.Prgr's:** 21.00–15.00. N: 21.00 (Filipino), 23.30(E), 00.00(Filipino), 00.30(E), 02.30(E), 03.00(Chinese), 04.00(E), 04.05(Filipino), 05.00(E), 08.05(Filipino), 09.00(E), 10.05 (Filipino), 10.30(E), 15.00.
Relay St's: DZEQ, Baguio City; DYMR, Cebu City; DXRP, Davao City; DXSM, Jolo; DXSO, Marawi City – **Ann:** "This is PBS, the Philippine Broadc. Sce. Your are tuned to st's DZFM 710kc, DZCP 1500kc, 105.5Mc FM, DUH2 6170kc in Manila, 1510kc in Baguio, 1410kc in Cebu, 1350kc in Davao, 1220kc in Jolo, 1300kc in Marawi City" – **V.** by letter. Rp. appreciated. Recorded re. in English appreciated – **Pub:** Prgr.schedule free – **F.PI:** Further 1kW relay st's Overseas Broadcast Dept.

3) Independence Grandstand, Luneta, Manila – **Ann:** "You are listening to st. DZCA owned and operated by the National Civil Defense Adm. of the Philippines" – **V.** by letter. Re. in E.

4) **FAR EAST BROADCASTING COMPANY.**
Addr: Box 2041. Manila. **Te:** 2-1057. **Cable:** Febcom – **L.P:** Dir: J. C. Lentz. Dir. Overseas Prgr's: L. J. Wheatley.

PHILIPPINE SERVICE: 20.55–15.00 on 680/3345/6030kc; 21.00 Philippine dialects, 21.45 **English**, 22.30 Tagalog, 23.00 **English**, 01.15 Tagalog, 02.40 **English**, 04.30 Chinese, 05.30 **English**, 09.00 Tagalog & Philippines dialects, 11.00–15.00 **English**.

Manila's Fine Music Station: 21.55–15.00 on 1030kc (all English). Shortwave: 09.00–11.30 on 15440/17810kc, 13.30–14.30 with 680kc (stereophonic broadc. & news).

Southern Philippine St. DXKI, Marbel, Cotabato: 21.30–23.30 **English**, 08.00–09.00 Phil. dialects, 09.00–10.30 Tagalog, 10.30–11.30 Phil. dialects, 11.30–13.00 **English**

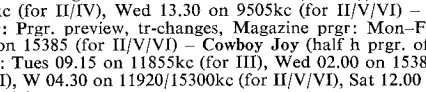
OVERSEAS SERVICE:
G.C. of the sw-tr's: Valenzuela: 120.58E/14.42N – Bocaue: 120.55E/14.48N
Abbreviations: I=China; II=Malaysia/Indonesia; III=Australia/NZ/New Guinea; IV=Japan; V=Thailand/Laos/Cambodia/Vietnam; VI=India/Pakistan/Ceylon; VII=USSR; VIII=Europe – a) English; b) Mandarin/Amoy; c) Indonesian; d) Thai/Lao/Burmese; e) Sinhalese; f) Tamil/Telugu/Malayalam/Marathi/Kannada; g) Gujerati-Bengali/Malayalam/Hindi/Tibetan/Nepali; h) Mandarin; i) Russian; j) Amoy/Cantonese; k) Malay; m) Lao/French/Cambodian; n) Mandarin/Cantonese; o) Japanese; p) Thai; q) French; r) Russian; s) Vietnamese.

H. of tr.	Areas	Nov 66/May 67 (kc)	L	N
21.30–23.15	I	6120/7230/9715	b	
21.30–22.45	II	11740	b	
22.00–23.30	III/II/IV	17810/15300	a	
22.30–23.45	V	9505	s+m	
23.30–00.30	V/II	*15385	a	23.30
23.30–23.45	II	11740/15300	c	
23.45–01.00	V	17810/15300	d	
01.00–03.00	VI	15365	g	
00.30–01.00	VI	15385	e	
01.00–03.00	V/VI	15385	a	01.30 02.55(Sun)
01.00–02.00	I/V/II	9715/11740/17810	h	
03.00–06.30**	V/VI/II	11920/15385/15300/17810	a	04.00
08.30–09.00	IV/V	9715/11890/15440	a	
	II	15300/17810	a	
09.00–11.30	V/II	15440/17810	a	11.00
09.00–10.30	III/VII	11855	a+i	09.00
09.00–10.30	I/V/II	9715/11890/15230	b	
10.30–11.30	I/V/II	9715/11855/11890/15230	j	
10.30–11.45	IV	11920	o	
11.30–12.45	V	11855	d	
11.30–11.45	V/II	9715/11890/15440/15230/17810	a	
11.45–13.30	V	9715/11890	s+m	
11.45–12.45	IV/II/V	11920/15230/15440	a	11.45
12.45–13.45	II	11920	k+c	13.40
12.45–14.00	V/VI/II	9505/15230	a	12.55
13.30–16.15	I	6030/7230/9715	n	
	II	11890	n	

H. of tr.	Areas	kc	L	N
14.00–15.30	V/VI	9505	f	
15.30–16.30	V/VI	9505	a	15.30
16.15–17.30	VII	6030/7230/9715/11855/11890	r	
17.30–17.40	VIII	6030/7230/9715/11855/11890	a	

*) to be replaced by 11855kc (Dec–Feb). **) Sun only exc. for 03.00–05.30 on 11920/15300kc (V) a.

Short Wave Mbg: Mon 09.15 on 11855kc (for III), Mon 12.00 on 11920kc (for II/IV), Wed 13.30 on 9505kc (for II/V/VI) – **Listeners Corner:** Prgr. preview, tr-changes, Magazine prgr: Mon–Fri 23.45–24.00 on 15385 (for II/V/VI) – **Cowboy Joy** (half h prgr. of cowboy music): Tues 09.15 on 11855kc (for III), Wed 02.00 on 15385 kc (for II/V/VI), W 04.30 on 11920/15300kc (for II/V/VI), Sat 12.00 on 11920 kc (for IV).
ANN: "This is the English Sce. of the FEBC transmitting from the Philippines (quarterly). This is the English Sce. of the FEBC operating in the (metre bands)" (halfhourly). This is Manila calling. The English Sce. of the FEBC operating at (give freq's). The time is..." (hourly).
Int-Sig: Part of hymn "Jesus Saves" played on vibraharp (bells).



V. by QSL-card and letter. Rp. preferred (3 IRCs for Air-mail) – **Pub:** Prgr.schedule free on request. "Signal" (every two months).
Fi: FEBC is a non profit, non-comm, missionary organisation being sustained by free-well gifts and offerings from interested friends.

5) Cotabato City, Cotabato.
6) National Teachers College, P.O. Box 3032, Manila – **Ann:** E: "This is the Voice of Education" – **V.** by letter.

7) **MANILA BROADCASTING COMPANY – Addr:** Radio Center, 964 Taft Avenue, Manila. **Te:** 36451. **Cable:** "Manbroadco" – **L.P:** Gen. Mgr: Ira Davis – a) **The Voice of Philippines.** – b) **The Voice of Manila. D.Prgr:** 21.00–16.00 – c) **Cebu Broadcasting Company:** ("Voice of Cebu" & "Radio Cebu"). **Addr:** Lim Bon Fing Bldg, Cebu City. **D.Prgr:** 21.00–15.00 – d) **R. Philippines.** – e) **The Voice of Leyte. Addr:** Tacloban, Leyte. – f) **Metropolitan Broadc. Co,** Cebu City. **D.Prgr:** 22.00–18.00 – h) **MBC,** Palo, Leyte. **V.** all st's verify by QSL-card. Rp.

8) Dept of Speech and Drama. Univ. of the Philippines, Diliman, Quezon City – **Ann:** "You are listening to DZUP, the R. st. of the State Univ. broadc. from Diliman, Quezon City, 1410kc on your radio dial, 7.16Mc in the sw-band" – **Int-Sig:** electric chimes E-C (mido) – **V.** by QSL-card or letter.
9) 3rd Floor, DBP Bldg, C. M. Recto St, Davao City. **Te:** 252 – **L.P:** Dir. Gen: G. E. Torres – **Home Sce:** DXMC (Davao), DXMZ (Rajah Buayan), DXMW (Surigao) 21.00–15.00; DXMI (Iligan), DXMM (Davao), DXMU (Cotabato), DXUM (Davao) 21.00–16,00; DXMX/DXRZ (Zamboanga), DXMO/DXMN (Cagayan de Oro), DXCM (Cotabato), DXRC (Cagayan de Oro) 21.00–16.00; DXMV (Cotabato): 21.00–15.00 – **INT-SIG:** DXMC: A gong (musical instrument used by Moros, natives of Mindanao) – **V.** by letter.

10) Philippine R. Educational & Information Center, Pius XII Catholic Center, United Nations Ave. P.O. Box 132, Manila. **Te:** 4-28-81 – **L.P:** Dir. Gen: J. B. Reuter S. J. Dir. Tec: O.W. Geyer – **HOME SCE:** 21.30–14.15. **N:** 22.30–22.45, 04.00–04.15, 10.30–10.45. **Educ Prgr's:** 23.30–01.15, 02.30–03.15, 05.15–06.45 – **ANN:** "DZRV Calling --- This is R. Veritas broadc. on 860kc" (L. used: English, Philippino, Japanese, Spanish, Indonesian & further 15 languages of So & So. Ea.Asia) – **V.** by QSL-card and letter. Recordings accepted – **PUB:** "Truth in Asia" (quarterly) – **F.PL:** Foreign Sce. from 2x100kW sw-tr's to start in June 1967.

Medium Waves: D. Prgr: 21.00–16.00 exc. where indicated.

11) **Quirine de Guzman,** 1000 C.M. Recto Ave, Manila (DZXR Manila, DZYB Baguio City, DZXM Manila, DZYQ Batangas).
12) **Nation Broadc. Corpo,** 306 Sampaguita Bldg, Quezon City. **D.Prgr:** 21.00–15.00(DZYZ Olongapo, DXRB/DXYZ Zamboanga, DZYI & DXRI Iligan, DZSP San Pablo).
13) **P. B. Araulle,** Cabanatuan City.
14) **Bolinao Electronics Corpo,** CBN Bldg, Aduana Str, Manila (DYCB Pardo, DZAQ/DZMM/DZBC Meycauayan, DXAW Matina, DZXN/DZRB Canaman, DZRD/DZRI Dagupan, DXLD Catabato.
15) **Republic Broadc. System,** Diliman, Quezon City. **D.Prgr:** 20.00–18.00 (DYOO Iloilo, DYBB Cebu).
16) **R. Mindanao Netw, Inc,** Philippine Herald Bldg, Manila(DXDC Davao, DXBC Butuan, DXIC Iligan, DXCC/DXVM Cagayan de Oro, DYHP Cebu, DZHP Caloocan).
17) **R. Philippines Netw, Inc,** 1195 Florida St, Manila(DZRL Laoag, DXDX Rajah Buayan, DZTG Tuguegarao, DZBS Baguio).
18) **Northern Broadc. Netw, Inc,** 105 N. Domingo St, San Juan, Rizal (DZVV Vigan, DZLU San Fernando, DYFN Iloilo, DZWX Baguio, DZNC Naga, DZVR Laoag, DYVP Masbate, DZYE Daet).
19) **Liberty Broadc. Netw, Inc,** Mocerse Bldg, Port Area, Manila (DYAG Cadiz, DXEG Davao).
20) **Monserrat Broadc. System,** CBN Bldg, Intramuros, Manila. **D.Prgr:** 21.00–15.00(DZXI Laoag).
21) **Lopez & Sons Broadc. System,** 9 Manikling St, Talayan Village, Quezon City(DYBC Cebu, DYOG Calbayog, DYHF/DYRL Iloilo, DXLL Zamboanga, DYWX/DYRL Bacolod, DYOR Ormoc, DYML Tagbilaran, DYRX Roxas, DZGH Sorsogon, DYKR Kalibo).
22) **Chronicle Broadc. Netw,** CBN Bldg, Manila. **D.Prgr:** 21.00–15.00 (DYPL Iloilo, DYCU Pardo, DZQL/DZXL/DZMY Meycauayan, DYXL/DYQL Bacalod, DXLI Iligan, DXJW Zamboanga).
23) **Pacific Broadc. Netw, Inc,** Rm 412, Quisumbing Bldg, Manila.
24) **R. Station DZGB,** Legaspi City – 25) **East Visayan Broadc. Co,** Taclobon City – 26) **Mareco, Inc,** 131 Del Monte Ave, Quezon City.
27) **Filipinas Broadc. Netw, Inc,** 5th Floor, Oledan Bldg, Makati, Rizal. **D.Prgr:** 21.00–15.00. (DZCV Tuguegarao, DZCV Rajah Buayan, DZRC Legaspi, DZXE Tarlac, DZEB Canaman, DXOG Ozamis).

28) **Cosmopolitan Broadc. System,** Laoag City.
29) **Allied Broadc. Center,** 298 Capipin St, Makati, Rizal (DYPR Puerto Princesa, DYRP Iloilo, DYRM Dumaguete, DYRD Tagbilaran, DYRH Bacolod, DYRS San Carlos).
30) **Henry Canoy,** Philippine Herald Bldg, Manila. (DYRR Ormoc, DXXU Cagayan de Oro, DZSJ San José).

31) **Estate of Segundo Santos,** 4th Floor, Rep. Supermarket Bldg, F. Torres St, Manila (DZAB Angeles, DZJS Pasig).
32) **Pacific Broadc. System, Inc,** 964 Taft Ave, Manila (DZAA Legaspi, DZXE Vigan, DZAD Dagupan).
33) **Associated Broadc. Corpo,** TVT Bldg, Manila(DXMT Davao).
34) **Manila Times Publishing Co, Inc,** TVT Bldg, Manila(DZTD Dagupan).

35) **R. St. DXWB,** Baguio City – 36) **R. St. DZFA,** Sorsogon.
37) **University of San Augustin,** Iloilo City – 38) **Agusan Broadc. System, Inc,** Butuan City.
39) **R. St. DYMX,** 350 Kinasangan St, Cebu City.
40) **Freedom Broadc. System,** 364 Cuenca St, Makati, Rizal(DZWJ Lucena, DZSE Sorgoson).

41) **University of the Philippines,** Quezon City.
42) **R. Communications of the Philippines, Inc,** Plaza Sta. Cruz, Manila.
43) **R. St. DZAL,** Legaspi City – 44) **Luzonian Colleges,** Lucena City – 45) **R. St. DYVM,** Cebu City – 46) **R. St. DYDB,** Danao City.
47) **Vanguard R. Netw, Inc,** 1239 A. Mabini, Caloocan City.
48) **Aguino Enterprises,** Virac, Catanduanes.

49) **R. St. DYVR,** Roxas City – 50) **R. St. DXRM,** Marawi City.
51) **Bulletin R. Netw,** Shurdut Bldg, Manila – 52) **Abellana National School,** Cebu City – 53) **Feati University,** Helios St, Sta. Cruz, Manila – 54) **Central Broadc. Inc,** Colon St, Cebu City.

VOICE OF AMERICA RADIO STATION PHILIPPINES

ADDR: Voice of America, Washington, D.C: 20547 USA.

STATIONS: Medium Waves: Malolos A: 920kc 326m 50kW: 21.00–16.30, – Poro A: 1140kc 263m 1000kW: 11.00–16.30.

Short Wave: Malolos 7.5/50kW: 21.00–03.30, 04.00–16.30.

kc	m	kc	m	kc	m	kc	m
6170	48.62	9580	31.32	11930	25.15	15250	19.67
7275	41.24	9655	31.07	15175	19.77	17765	16.89
7295	41.12						

Poro 35/50/100kW: 21.30–02.30, 04.00–16.30.

kc	m	kc	m	kc	m	kc	m
6185	48.50	9665	31.04	11930	25.15	15365	19.52
7135	42.05	9700	30.93	11965	25.07	15395	19.49
7175	41.81	11730	25.58	15155	19.80	17750	16.90
7275	41.24	11735	25.56	15185	19.76	17820	16.84
9530	31.48	11775	25.48	15210	19.72	17830	16.83
9590	31.28	11805	25.41	15250	19.67	21570	13.91
9615	31.20	11875	25.26	15345	19.55		

(G.C: Poro: 120.17 E/16.37 N; Malolos: 120.48 E/14.52 N).

D.PRGR: Medium Wave 1140kc: 12.00–13.00 Vietnamese, 13.00–14.00 Cambodian, 14.00–14.30 Thai, 14.30–16.00 Vietnamese, 16.00–16.30 English – **Short Wave:** See USA – **ANN:** "You are listening to the Voice of America from the Philippines" – **INT-SIG:** Variations of "Columbia, the Gem of the Ocean" – **V.** by QSL-card.

ARMED FORCES RADIO & TV SCE: see USA

RYUKYU ISLANDS

L.T: GMT+9 h – **Pr.L:** Japanese, Okinawan, English.

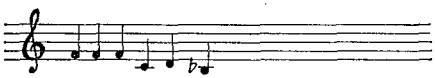
RYUKYUS BROADCASTING CORPORATION (Comm.)

ADDR: CPO Box 4, Naha, Okinawa. **Te:** 8-4161 – **L.P:** Man. Dir: S. Hirakawa. Dir. Eng. Dept: S. Yamazato.
HOME SCE: KSAR 740kc 5kW: 20.00–16.00 Japanese
KSBK 880kc 3kW: 20.00–16.00 English – **N:** Every h on the h.

ANN: KSAR: "RBC" or "Ryukyu hoso desu" every 15 or 30 min's. KSBK: "Radio 880" – V. by QSL-card.

FAR EAST BROADCASTING CO. (Non-Comm, missionary)

ADDR: CPO Box 55, Naha. Cable: Febcomb. Te: 78208 – L.P: Dir: R. F. Stiles. Dir. Tec: D. Hudson. Dir. Prgr's: T. Dresbach (KSAB), Matsukawa (KSDX), R. Kaufman (KSBU).
STATIONS: KSAB 1020kc 1kW – KSDX 1250kc 5kW – KSBU 1360kc 100kW.
HOME SCE: KSAB (English): 21.00–14.00. N, Wrp: 21.55, 22.55, 23.55, 00.55, 02.45, 08.45, 11.45 – KSDX (Japanese): 22.00–14.00. N: 22.30, 23.30, 02.30, 03.30, 09.30, 12.30 – KSBU (Chinese): 09.00–18.00 (beamed towards Shanghai).
ANN: Call letters every 15 or 30 min.
INT-SIG: Vibraphone – V. by QSL-card. Rp. preferred.



PUB: Prgr.schedule free – FI: By freewill gifts.

RADIO OKINAWA CO. LTD. (Comm.)

ADDR: CPO Box 405, Naha, Okinawa. Te: 8-5128 – L.P: Pres: J. Toma – STATION: KSDT 780kc 5kW.
HOME SCE. in Japanese: 20.00–15.00 – ANN: "KSDT, ROK" or "R. Okinawa des" at 15 or 30 min. intervals – INT-SIG: Chimes or audio tones – V. by QSL-card.

VOICE OF AMERICA RADIO STATION IN OKINAWA

ADDR: Voice of America, Washington, D.C, 20547, USA.
STATIONS: Medium Wave: Okinawa-A 1178kc 255m 1000kW: 11.00–16.00.

Short Waves: Okinawa 35/100kW: 21.30–01.00, 09.00–16.30.

kc	m	kc	m	kc	m	kc	m
6010	49.92	7135	42.05	9740	30.80	11965	25.07
6075	49.38	7175	41.81	11715	25.61	15410	19.47
7165	41.87	9615	31.20	11920	25.17	17795	16.86

G.C: 128.09 E/26.44 N.

D.PRGR: Medium Wave: 11.00–14.00 Chinese, 14.00–14.30 Korean, 14.30–16.00 Chinese – Short Wave: See USA – ANN: "You are listening to the Voice of America from Okinawa" – INT-SIG: Variations of "Columbia, the Gem of the Ocean" – V. by QSL-card.

VOICE OF THE UNITED NATIONS COMMAND (VUNC)

ADDR: see Korea – STATIONS: Deragawa (Okinawa) 9418kc 31.86m 20kW – 13830kc 21.69m 20kW – D.PRGR's in Korean, Chinese: 06.00–21.00. V. by QSL-card. PUB: Prgr.schedule yearly.

SABAH (Federation of Malaysia)

L.T: GMT+8 h – Pr.L: English, Malay, Chinese, Kadazan, Murut, Indonesian.

R. MALAYSIA SABAH (Gov.)

ADDR: Dept. of Radio, Jesselton. Te: 2711. Cable: "Broadcasts". L.P: Contr. of Radio: S. H. Amin. Chief Eng: W. A. M. Ramsbotham.
STATIONS (System: STC, Redifon, Marconi):
565kc 10kW – 750kc 5kW – 930kc 5kW. FM: 97.5Mc 100kW.
4970kc 60.36m 5kW (G.C: 116.03E/05.56N).
HOME SCE: On 930/4970kc+FM (Jesselton): W 22.30–00.30, 04.00(Sat 03.00)–06.15, 07.45–15.00. Sun 22.30–07.15, 07.45–15.00. English: 23.30–24.00(W), 01.30–04.00(Sun), 03.00–04.00(Sat), 05.00–05.30(Sat 06.30), 11.00–11.45, 13.30–15.00 – Malay: 00.00–00.30(W), 00.30–01.30(Sun), 05.30–06.15(Mon–Fri), 05.30–06.45(Sun), 06.30–07.45(Sat), 11.45–13.30 – Chinese: 23.00–23.30(Sun), 04.30–05.00, 08.00–09.30 – Kadazan: 22.30–23.00(Sun 23.30), 04.00–04.30, 09.30–09.45, 10.00–11.00 – Murut: 09.45–10.00 – Indonesian: 07.45–08.00.
Regional St's: Tenom: 565kc: 08.30–09.00 Murut (tape from Jesselton), 09.00–13.30 rel. Jesselton. Tawau 750kc: Sun 05.30–07.15 rel. Jesselton, 07.45–08.00 rel. Jesselton, 08.00–09.00 (tape from Kuala Lumpur), 09.00–11.00 rel. Kuala Lumpur, 11.00–11.45 (tape from Jesselton), 11.45–13.30 rel. Jesselton – FM: rel. Jesselton.
ANN: "This is R. Malaysia, Sabah broadc. from Jesselton" – INT-SIG: Opens with Sabah anthem and closes with Nat. anthem – V. by letter. Re. to Asst. Contr. of Prgr's – PUB: "R. Sabah Calling" (fortnightly) – ALF: $ 12.00.

SARAWAK (Federation of Malaysia)

L.T: GMT+8 h – Pr.L: English, Malay, Chinese, Dayak, Melanu, Bidauyh.

R. MALAYSIA SARAWAK (Gov.)

ADDR: Broadc. House, Kuching. Te: 2345. Cable: Broadcasts – L.P: Contr. of Radio: J. Salleh Askor. Ag. Chief Eng: Sun Tai Lum.
STATIONS (G.C: 110.20E/01.33N):

kc	m	kW	kc	m	kW	kc	m	kW
730	410.9	20/10	4950	60.60	20/10	7270	41.27	20/10
850	352.9	20/5	5037	59.56	20/10	9535	31.46	20/10
950	315.8	20/5	7130	42.08	20/10	9565	31.37	20/10
3259	92.05	20	7160	41.90	20/10	9615	31.20	20/10
4835	62.05	20/10						

HOME SCE. in English, Malay, Chinese, Iban, Bidavuh:
Morning Sce: On 730/3259/4950/7160kc: 23.00–01.00 (English 23.00, Chinese 00.00) – On 850/4835/7270kc: 23.00–01.00 (Iban 23.00, Bidayuh 23.30, Malay 00.00).
Midday Sce: On 730/4950/7160/9565kc: Chinese 04.00–05.00(W) – English: 05.00–05.30(Sat 06.30) – On 850/4835/7270kc: Melanu: 04.00–05.00(Tues) – Malay: 04.00–05.00(Wed), 04.00–05.30(Fri), 04.00–06.00(Sun) – Iban: 04.00–05.00(Mon, Thurs, Sat), 03.00–04.00 (Sun) – On 950/5037.5kc: Bidayuh: 04.00–05.00(Sun).
ANN: E: "This is R. Malaysia Sarawak". Malay: "Ini-lah R. Malaysia Sarawak". Iban: "Tu R. Malaysia Sarawak". Chinese: "Cher Sher Sarawak Malaysia Kwang Bo Tien Thai". Bidayuh: "Ati Inuh R. Malaysia Sarawak" – INT-SIG: A musical phrase played on a native instrument, the Sapé, a musical phrase alternating between A and F. A 1kc tone is radiated for a 3 min's commencing 5 min's before each tr – V. by QSL-card – PUB: "R. Times" (fortnightly).

SAUDI ARABIA

L.T. GMT+3 h – Pr.L: Arabic.
Arabic Time: The local sunset is 12 hrs Arabic Time. This, being a sun time, either is closer or farther from Local Standard Time which is GMT+3 h for both Riyadh and Jeddah. The Arabic Time at Riyadh is approx. 5 hrs behind Local Standard Time in Winter and approx. 7 hrs behind Local Standard Time in Summer. The Arabic Time of Riyadh is approx. 30 min's ahead of Jeddah time.

SAUDI ARABIAN BROADCASTING (Gov.)

ADDR: Ministry of Information, Airport Rd, Jeddah. Cable: Information Ministry. Te: 4171 – L.P: Minister of Inf: H. E. Sheikh J. Hijailan. Dir. Gen. of Broadc: Sheikh A. F. Ghazawi. Dir. of Technical Sce's (Radio & TV): A. Sabri (Eng. Dept, Riyadh).
STATIONS: (G.C: Jeddah 39.12E/21.88N; Riyadh: 46.23E/24.30N). *=Jeddah; **=Riyadh.

Medium Waves:

kc	m	kW	Sce.	kc	m	kW	Sce.
**575	523	1	English	**647	464	1	Arabic
*602	499	50	Arabic	*723	415	50	English

Short Waves:

kc	m	kW	kc	m	kW	kc	m	kW
**6000	50.00	50	** 9720	30.86	50	**11950	25.10	50
*7230	41.49	100	*11855	25.31	50	*15115	19.85	50
**7220	41.55	50	*11870	25.27	50	*15150	19.80	100
*9670	31.02	50						

HOME SCE: General Arabic Prgr: Riyadh: Approx. 01.00–06.00 & 09.30–21.00 on 6000, 7220, 9720, 11950kc – N: 02.30, 04.30, 05.30, 10.00, 13.15, 16.00, 18.00, 19.30 (times are approx). Jeddah: Approx. 01.30–06.30 & 15.30–21.00 on 7230kc; 01.30–06.30 & 19.30–21.00 on 9670kc; 15.30–21.00 on 11855kc; 09.30–15.30 on 15150kc; N: 03.00, 05.55, 10.30, 13.50, 15.00, 16.00, 19.15, 21.00 (times are approx).
English Prgr: On 575/723kc: 04.30–05.30, 11.00–12.00 (Fri and holidays 10.00–13.00), 17.00–20.00. N: 04.30, 11.30, 17.00, 19.45.

FOREIGN SCE: On 15115kc: Indonesian 13.00–13.55 (N: 13.45), Urdu 14.00–14.55 (N: 14.45), Persian 15.00–15.55 (N: 15.45). On 11855kc: Swahili 16.00–16.55 (N: 16.45).

ANN: Gen. Arabic Prgr: "Al Izaa Al Arabia Al Seoudia". Voice of Islam: "Sawt Al Islam Min Makatah Al Mukarahmah". Indonesian: "Disini Saudi Arabia". Urdu: "Mecca Mukarama Ka Awas Saudi Arab Radio". English: "This is the English Sce. of Saudi Arabian Broadcasting". Persian: "Inja Arabastani Sadiest Bachschi Farsi". INT-SIG: Call to prayer (Az'an) played on flute – V. by letter, postcards. Recordings accepted – F.PL: 1200kW mw-tr. at Riyadh (May 67); 100kW mw-tr. at Damman (before 1/7-67); Four 250kW mw-tr's at Riyadh (1969); 1kW mw-tr's at Medina, Abha, Jizan, Tabuk, Hail & Buraidah.

ARAMCO RADIO (Priv)

ADDR: Dahrein – STATION: 1190kc – D.PRGR: 03.00–15.00 N. in English: 08.45–14.45.
The st. is operated for the entertainment of oil workers in the Persian Gulf. It is known as "The Voice of the Desert".
From 15.00 until about 20.30 the st. is used to broadcast the English soundtrack of ARAMCO-TV in Dahrein.

FORCES RADIO SHARJAH

L.T: GMT+4 h – ADDR: Officer in charge, Royal Air Force Sharjah, B.F.P.O. 64. Te: Sharjah 321 Ext. 75 – L.P: St. Mgr: Flt. Lt. P. D. Long – STATION: 1480kc 0.05kW – D.PRGR's in English: Mon–Fri

02.00–03.00, 10.00–12.00, 14.30–19.00 (Sat 05.00–19.59, Sun 05.00–12.00, 14.30–19.00). N: 02.00, 11.00, 18.00 (relay BBC/WS) – ANN: "You are tuned to Forces Radio Sharjah, broadc. on 1480kc, 202.7m in the medium wave band" – V. Reports not wanted.

SINGAPORE

L.T: GMT+7½ h – Pr.L: Malay, Chinese, Tamil, English.

RADIO SINGAPURA (Gov.)

ADDR: Dept. of Broadc. Ministry of Culture, P.O. Box 1902, Singapore. Te: 50401. Cable: Broadcasts. L.P: Ag. Dir. of Broadc: P. S. Raman. Asst. Dir. (Eng): G. Ang. Asst. Dir. (Prgr): C. V. Doral. Ag. Contr: S. T. Keong. Comm. Mgr: H. F. Lee.

STATIONS (G.C: 103.51E/01.24N):

kc	m	kW	Prgr.	kc	m	kW	Prgr.
630	476.2	10	E	6000	50.00	7.5	C
680	441.2	10	C	6155	48.74	50	M
790	379.7	100	Multilingual	7170	41.84	7.5	C/T
990	303.1	20	M	7250	41.38	7.5	M
1370	219.0	20	C/T	9635	31.14	50	C
5052	59.38	7.5	E	11940	25.13	50	E

E=English, C=Chinese, M=Malay, T=Tamil.

HOME SCE's: English Sce: On 630/5052/11940kc: Mon–Thurs 22.30–01.30, 03.30–08.30, 09.30–16.30; Fri/Sat 22.30–01.30, 01.30–04.30 (not on 11940kc), 04.30–16.30; Sun 22.30–16.30. N: 23.30, 00.30, 06.00, 11.30, 14.00, 15.30.

Malay Sce: On 790/6155/7250kc: Mon, Wed 22.30–01.30, 04.00–06.30, 07.30–16.30; Tues, Thurs 22.30–01.30, 02.00–04.00 (not on 6155kc), 04.00–06.30, 07.30–16.30; Fri/Sat 22.30–06.30, 06.30–09.30 (not on 6155kc), 09.30–16.30; Sun 22.30–16.30. N: 23.45, 00.45, 05.30, 10.45, 13.45, 15.15.

Chinese Sce: On 680/5990/9635kc: Mon–Fri 22.30–01.30, 02.30–03.30 (not on 9635kc), 03.30–07.30, 08.30–16.30; Sat 22.30–01.30, 01.30–04.30 (not on 9635kc), 04.30–16.30; Sun 22.30–16.30. N: 23.45, 00.45. 05.00, 05.45, 11.45, 12.45, 13.45, 14.45. On 990/7170kc: 13.30–16.30. N: 14.00, 15.00.

Tamil Sce: On 990/7170kc: Mon, Wed, Sat, Sun 22.30–13.30; Tues, Thurs, Fri 22.30–03.00, 05.00–13.30. N: 23.45, 00.30, 06.00, 11.00, 13.00.

ANN: E: "This is R. Singapore". Malay: "Inilah R. Singapura" – INT-SIG: Chimes – V. by QSL-card. Rp. Recordings accepted – PUB: "Radio Weekly" and "TV & Radio Magazine" – FI: By Gov. and licence payments – ALF: $ 12.00.

BRITISH FORCES BROADC. SCE. SINGAPORE

is operated by the Ministry of Defence to provide a service of inf, entertainment as well as a link with home for H.M. Forces stationed in Singapore. It is non-comm, does not accept adv.

ADDR: BFBS, c/o HQ FARELF, GPO Singapore. Te: 2801 – L.P: St. Contr: W. J. O. Ettridge.

STATION (System: Marconi): 5010kc 59.88 m 10kW.

D.PRGR: 06.30–12.30 British Prgr, 12.30–14.30 Gurkha Prgr – N: 09.15, 11.00 – ANN: "This is the British Forces Broadc. Sce. Singapore" – INT-SIG: The Waltzing Bugle Boy (Celeste) – V. by QSL-card. Rp.

REDIFFUSION SINGAPORE (Comm.)

ADDR: P.O. Box 608, Singapore. Te: 25011. Cable: Rediffuse. L.P: Man. Dir: G. H. Oldridge. Gen. Mgr: J. Snowden. Comm. Mgr: Mrs. J. Taylor. D.PRGR'S: 22.30–16.30; Two simultaneous prgr's (English & Chinese) via wired network.

SYRIAN ARAB REP.

L.T: GMT+2 h (Su: GMT+3 h) – Pr.L: French, Arabic.

SYRIAN BROADCASTING AND TELEVISION (Gov.)

ADDR: Ommayad Square, Damascus. L.P: Dir. Gen: A. Haurani. Dir. Tec: Y. Zenati. Dir. Prgr's: S. Muhasseb.

STATIONS:

kc	m	kW	kc	m	kW	kc	m	kW
566	530	300	786	381	60	7145	41.99	50/7.5
665	451	100	863	348	100/10	7185	41.75	20
719	417	2	953	314.8	60	7235	41.47	50/20
746	402	100	6165	48.66	20	9555	31.40	50
G.C: (sw only): 36.07E/33.30N						9605	31.23	20

ARABIC: 04.00–23.00 on 566/786/953kc (also on 655kc exc. 14.00–15.00); 04.00–15.00, 16.00–23.00 on 746kc, 13.00–16.00 on 719kc, 14.00–15.00 on 863kc. On 7145kc: 07.30–10.00, 19.00–23.00.

To No. Africa: 04.00–07.30 & 10.00–13.00 on 7235kc (50kW), 13.00–23.00 on 7235kc (20kW) – To Egypt: 04.00–07.30 on 6165kc (20kW), 10.00–17.30 on 7185kc (20kW) – To Europe: 19.00–23.00 on 6165kc (50kW).

N: 04.15, 08.15, 11.15, 14.15, 16.15, 18.15, 20.15, 22.15.

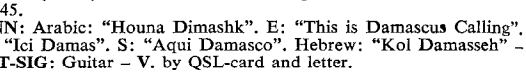
FRENCH & ENGLISH: 04.00–06.30 on 719kc (2kW), 7145kc (7.5 kW), also on 963kc (10kW) until 07.00. 16.00–19.00 on 863kc (10kW) & 719kc (2kW) – To Europe: 16.00–19.00 on 7145kc (50kW). N in English: 04.15, 16.15. N in French: 05.15, 17.15.

HEBREW, GERMAN, YUGOSLAV (mixed): 13.00–14.00 on 665/7145kc (100/7.5kW). N in Hebrew: 13.15.

TURKISH: 14.00–15.00 on 746/863/7145kc (100/100/7.5kW). N in Turkish: 14.15.

ARABIC, SPANISH, PORTUGUESE (mixed): 22.30–01.00 on 9605kc (20kW) to No. America, 9555kc (50kW) to So. America, 6165kc (20kW) to Ce. America. N in Spanish: 23.00. N in Arabic: 23.45.

ANN: Arabic: "Houna Dimashk". E: "This is Damascus Calling". F: "Ici Damas". S: "Aqui Damasco". Hebrew: "Kol Damasseh" – INT-SIG: Guitar – V. by QSL-card and letter.



THAILAND

L.T: GMT+7 h – Pr.L: Thai.

THE THAI NATIONAL BROADCASTING STATION (Gov.)

ADDR: Public Rel. Dept, Bangkok. Te: 4881. Cable: Radio Thailand. L.P: Dir. Gen: Lt. Gen: K. Punnakanta. Dep. Dir. Gen: P. Hongsanand. Dr. W. Siwasariyananda. St. Mgr: I. Kanchanakooha. Dir. Tec: Ch. Tandakoseya. Chief, Home Service: D. Sriyapai. Chief, Overseas Broadc. Division: V. Ampaivorn.

Call	kc	m	kW	Call	kc	m	kW
HSK27	810	370.1	1	–	910	330	1
HSK2	830	370.4	10	HSLK	927	323.5	10
HSK28	856	350.4	10	–	910	330	1
Short Waves (G.C: 100.30E/13.47N):							
HSKB	4830	62.10	5	–	7105	42.22	2.5
HSK5	6070	49.42	1	–	7305	41.07	2.5
HSK4	6160	48.70	1	HSK9	11910	25.18	100

HOME SCE: Thai: 00.00–01.00, 12.00–14.45 on 830/4830/6070/6160/7305/11910kc – Other Languages: French 05.30–06.00 on 1146/11910kc.

OVERSEAS SCE: To No. America: 04.15–05.15 English on 910/7105/11910kc. To Korea (in Thai): 09.30–09.45 on 810/7305/11910kc. To Vietnam: 09.45–11.55 on 810/11910kc (Vietnamese 09.45, Cambodian 10.00, English 10.25–11.30, Malay 11.30, Mandarin 11.45).

General Overseas Sce: 10.25–11.57 on 6160/11910kc – Rel. Home Sce: 13.00–14.00 on 11910kc. N: English 04.25, 10.30. Thai 09.32, 13.00. Vietnamese 09.45. Cambodian 10.00. Malay 11.30. Mandarin 11.45.

Regional Stations (in Thai only):

1) Bangkok: 23.00–03.50(Sun only) on 856/6097kc, 04.00–07.30(Sun only) on 856/4830kc, 08.00–12.00 on 856/4830kc, 12.00–15.30 on 856/6097kc.

2) Surasdhani: 00.00–01.00 on 635/4640kc (both 1kW), 04.00–07.00 on 1210/4640kc (both 1kW), 07.00–10.00 on 635kc, 11.00 15.00 on 1210/4640kc.

3) Dhonburi: On 960kc (1kW) 23.00–02.00, 03.00–06.00, 10.00–15.30; On 1256kc (1kW) 00.00–01.00, 05.00–06.00, 10.00–15.00.

ANN: E: "This is the Overseas Broadc. St. of Thailand". F: "Ici R. Bangkok". Thai: "Thini Stani Vitayu Krajai Sieng hang Pra Thes Thai" – V. by letter. Re. to Overseas Broadc. Division, Public Relations Dept, Bangkok.

MINISTRY OF EDUCATION (Gov.)

ADDR: Division of Educ. Inf, Ministry of Education, Bangkok. Te: 46139 – L.P: Dir. Div. of Educ. Inf: K. A. Meesook. Dir. Tec: P. Sapsomboon.

STATIONS (G.C: 100.30E/13.47N):

1180kc 254.2m 2kW – 3202kc 91.69m 2kW – 6062kc 49.48m 2kW.

HOME SCE. in Thai, English: Mon–Fri 11.00–14.00, Sat/Sun 09.00–12.00 (in Thai and occ. English); Mon–Fri 01.30–07.00 School prgr's (in term time) – N: 11.35, 13.00 – ANN: E: "This is the Educ. Broadc. St. of Thailand, broadc. on a frequency of...". – V. by letter – F.PL: 10kW (on 1180kc) – PUB: "Radio Times" in Thai.

THAI TELEVISION CO. LTD. (Comm.)

ADDR: Mansion B. Rajadamnern Ave, Bangkok. Cable: "Thaitv". Te: 27952 – L.P: Dir. Gen: K. Punagunta. Man. Dir: P. Hongsanand. Chief Eng: C. Tantakosai. Prgr. Mgr: Mrs. S. Siddhichai.

STATIONS (G.C: 100.30E/13.46N):

1500kc 200.0m 10kW Prgr. I – 6010kc 49.92m 10kW Prgr. I
1150kc 260.9m 10kW Prgr. II – 7105kc 42.22m 1kW Prgr. II

FM: 100.5Mc (Prgr. I), 94.5Mc (Prgr. II music), 96.5Mc (Prgr. III), 95.0Mc (Stereo-Multiplex) (Prgr. IV).

HOME SCE. in Thai: Prgr I: 23.00–16.00 on 1500/6010kc. **2nd Prgr** (Music): On 1150/7105kc. **N. in Thai:** 00.00, 00.45, 01.00, 02.30, 03.35, 04.20, 05.40, 07.45, 08.30, 09.30, 10.40, 11.30, 13.00, 13.40, 15.00.
ANN: "This is the regular Sce. of TTV Radio, broadc. everyday on the freq's of 1500kc, 6010kc and 100.5Mc on FM. Transmission comes to you every day, from six o'clock to eleven o'clock" – V. by letter. Recordings accepted – **F.PL:** 40kW – **PUB:** TTV Mirror (monthly).

OTHER SHORTWAVE STATIONS

kc	m	kW	h of tr.
1) 4620	64.94	1	
2) 4755	63.09	0.5	09.00–14.30
3) 4770	62.89	1	05.00–06.00
4) 4783	62.72	0.5	03.00–06.00
4) 5030	59.64	0.5	11.00–15.00
5) 5040	59.52	0.25	07.30–09.00
6) 5550	54.05	1	
1) 5825	51.50	1	
2) 5955	50.38	0.5	09.00–14.30
7) 5985	50.13	0.5	05.00–06.00
5) 6100	49.18	0.25	04.00–07.00
8) 6105	49.14	1	09.00–15.00
9) 6405	46.84	0.25	03.00–05.00
2) 7135	42.05	0.5	09.00–14.30
10) 7160	41.90	0.25	05.00–06.00*
3) 7230	41.49	1	10.00–13.00
1) 7620	39.37	1	

*) Sun also 11.00–16.00

1) Police Station Rajsima – 2) Post & Telegraph Dept, Wat Liag – 3) Police Station, Paruskawan – 4) Military Signal Corps, Bangkok – 5) Naval Station, Bangkok – 6) Military Station, Saraburi – 7) Military Station, Saung-Soon – 8) Ministry of Agriculture, Bangkok – 9) Office of the Royal Household – 10) R.A.F. Station, Don Muang.

TIMOR (Portuguese)

L.T: GMT+8 h – **Pr.L:** Portuguese.

EMISSORA DE RADIODIFUSÃO DE TIMOR PORT. (Gov.)
ADDR: Dili. **Te:** 295 – **L.P:** Dir. Gen: D. S. M. de Carvalho Braga. St. Mgr: J. J. das Neves. Dir. Tec: J. Cosme.
STATION (G.C: 125.34E/08.33S): 3268kc 91.78m 1kW.
HOME SCE. in Portuguese: D 04.30–06.00, 10.00(Sun 00.30)–14.30 (Sat 15.00) exc. for times for Tetum (local language) and Chinese. **Tetum:** 10.15–10.25(Thurs 10.45) – **Chinese:** Wed & Sat 12.30–13.00.
ANN: "Aqui Emissora de Radiodifusão de Timor Português, funcionando na banda dos 90 metros, freq. de 3268kc".
INT-SIG: Gong – V. by QSL-cards or letter. Recordings accepted.
FI: By Gov. adv. & license payments – **ALF:** Esc. 100,–.

TURKEY

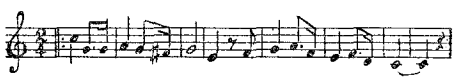
L.T: GMT+2 h – **Pr.L:** Turkish.

TURKISH RADIO-TELEVISION CORPORATION (Indep.)
ADDR: TRT Türkiye Radyo Televizyon Kurumu, Genel Müdürlügü, Ankara. **Cable:** TRT. **Te:** 172323. **Telex:** 7476 – **L.P:** Dir. Gen: A. Öztrak. Secr. Gen: K. Akçakoca. Dir. Tec: D. Erden. Dir. Prgr: C. M. Altar. Dir. Adm: M. Tasçioglu. Legal Advisor: T. Gurzuman.

STATIONS: Ankara: Main st. Other reg. st's.

	kc	m	kW		kc	m	kW
Ankara	182	1648	240	Kars	1165	257.5	2
Erzurum	245	1224	100	Van	1178	254.7	2
Istanbul	701	428.0	150	Gaziantep	1210	247.9	2
Istanbul	963	311.5	2	Antalya	1295	231.7	2
Izmir	971	309.0	100	**Short Waves:**	**kc**	**m**	**kW**
Izmir	1033	290.4	2	Izmir	7650	39.21	1
Ankara	1063	282.2	2	Diyarbakir	7650	39.21	1
Adana	1133	264.8	2	Iskenderun	9770	30.70	0.3

HOME SCE: R. Ankara: 182kc: D 04.30–22.00. 1063kc: 14.55(Sat 09.55, Sun 08.00)–23.00 – **R. Istanbul:** 701kc: W 04.25–13.00, 14.55–22.00. Sun 04.25–22.00; 963kc: 14.55(Sat 09.55, Sun 08.00)–23.00 – **R. Izmir** (on all freq's): W 04.25–08.00, 09.55–13.00, 14.55–23.00 (Sat 09.55–23.00). Sun 04.25–23.00.
R. Adana/Antalaya/Gaziantep/Erzurum/Kars/Van: D 04.25–08.00, 09.55–12.30, 15.55–22.00.
R. Diyarbakir/Iskenderun: W 04.25–07.00, 09.55–11.30(Sat 12.30), 15.55–21.00. Sun 04.25–08.00, 09.55–12.30, 15.55–21.00.
ANN: "Burasi Ankara" (This is Ankara) or "Burasi Istanbul Radyosu" (This is Radio Istanbul).
INT-SIG: R. Ankara and R. Istanbul:



FOREIGN SERVICE

STATIONS: (G.C: 30.42E/39.54N)

Call	kc	m	kW	Call	kc	m	kW
TAT	9515	31.53	100	TAU	15160	19.79	100
TAP	9745	30.78	20	TAV	17820	16.84	100

Nov/Feb, March/April

Arabic	kc	Persian	kc
16.00–16.30	9745	13.45–14.15	17820
18.30–19.30	9745	15.30–16.00	9745
Bulgarian		**Pushtu**	
17.00–17.30	9745	13.15–13.45	17820
		Rumanian	
English		16.30–17.00	9745
14.15–14.45	17820	**Serbo-Croat**	
22.00–22.30	15160	17.30–18.00	9745
French		**Turkish**	
19.00–19.30	15160	04.20–07.00*	15160
		07.00–13.00**	15160
German		15.30–18.10	9515
18.30–19.00	15160	19.45–21.45	9515
Greek		**Urdu**	
18.00–18.30	9745	14.45–15.15	17820

*=relay 182kc – **=relay 182kc until 11.00(Sun), 12.00(Sat).

N: at the beginning of every tr – **ANN: E:** "This is R. Ankara". **F:** "Ici postes émetteurs de Turquie, R. Ankara a ondes Courtes émettant sur une longueur d'onde de...". **G:** "Hier ist der Türkische Landessender Ankara, auf Kurzwelle...". Turkish: "Burasi Türkiyeradyo yayin postalari, kisa dalga Ankara Radyosu".
INT-SIG: As for Home Sce – V. by QSL-card – **F.PL:** Diyarbakir 209kc 250kW – **PUB:** Prgr.schedule (weekly) for R. Ankara, R. Istanbul, R. Izmir, R. Antalya, R. Adana, R. Ganziantep – **ALF:** Turkish £ 20.–.

ISTANBUL UNIVERSITY (Gov. Educ.)
ADDR: Fen Fakültesi (Faculty of Science), Tatbiki Fizik Merkezi, Istanbul. **Te:** 222808 – **L.P:** Dir. Gen: Prof. Dr. F. Yenicay. St. Mgr: Y. Kaini. Dir. Tec: S. Sinman – **STATION:** 7450kc 40.27m 1.75kW.
D.PRGR: 13.00–15.00 (propagation experiments), 16.00–18.00 – **University N:** 16.00.
ANN: "Burasi 40 metre dalgaboyu üzerinden tecrübe yayini yapan Istanbul Universitesi Fen Fakültesi Radyosu" ("Here is the Experimental R. Station of Istanbul University Faculty of Science broadcasting on 40m" – V. by letter. Recorded re. in E. preferred – **PUB:** Prgr. schedule free.

TECHNICAL UNIVERSITY OF ISTANBUL (Gov.)
ADDR: Teknik Universite, Elektrik Fakültesi, Yüsek Frekans Teknigi Kursüsü, Istanbul. **Te:** 482250.
HOME SERVICE: I.T.Ü.=Istanbul Teknik Universiti.
6280kc 47.77m 1kW. 18.00–20.30(exc Sat).
FM: 99.5Mc 0.25kW: 18.00–20.30(exc Sat).
Frequencies are shifted slightly if interference occurs.
D.PRGR: Classical Music & National(Turkish) Music: Sun, Tues, Thurs 18.00–18.30.
ANN: Turkish: "Burasi Istanbul Teknik Üniversitesi Radyosu". E: "Here is the R. Station of the Technical University of Istanbul".
INT-SIG: "Turkish March" by Mozart – V. by letter. Rp.

ELEKTRIK ELEKTRONIK SANAT ENSTITÜSÜ DEMENE RADYOSU (Educ. st. for Schools)
ADDR: Izmir. **Te:** 53947 – **L.P:** Dir. Gen: A. Kirdar – **STATIONS:** TAO6 1200kc 0.75kW – 7100kc 0.25kW – **D.PRGR:** 13.00–14.00 – **ANN:** "Elektrik Elektronik Sanat Enstitüsü Demenne Radyosu" – V: Reports not wanted and not answered.

TECHNICAL SCHOOL OF ISTANBUL (Educ.)
ADDR: Istanbul Yüksek Teknik Okulu, Yildiz, Istanbul. **Te:** 473230.
STATION: TAO5 7143kc 42.01m 1.6kW – **D.PRGR'S:** W 18.00–20.00. Sun 11.00–13.00. Language Lessons (30 min's) & Music (Western & Turkish recordings) – **ANN:** "Burasi Istanbul Yüksek Teknik Okulu Radyosu" – V. by letter.

VIETNAM (Democratic Republic)

L.T: GMT+7 h – **Pr.L:** Vietnamese.

THE VOICE OF VIETNAM (Gov.)
ADDR: No. 58, Quan-Su Street, Hanoi. **Te:** 4134 – **L.P:** Dir. Gen: T. Lâm. Dir. Foreign Prgr's: L. Quy.
STATIONS: Hanoi.

kc	m	kc	m	kc	m	kc	m	kc	m
1010	297.0	4684	64.05	7060	42.49	9840	30.49	11840	25.34
1240	241.9	5985	50.13	9760	30.74	11760	25.51	15044	19.94

HOME SCE: 21.14–23.30, 02.45–05.00, 07.30–08.30, 09.30–16.00 on 1010/4684/5985/9840/11840/15044kc. **N:** 22.30, 04.00, 04.30, 11.30, 13.00, 13.45.
FOREIGN SERVICE: English: 23.00–23.30 on 1240/9840/11840kc; 10.00–10.30, 13.00–13.30, 15.30–16.00 on 1240/9760/11760kc – **French:** 23.30–23.45, 04.15–04.30, 13.30–14.00 on 1240/9840/11840kc – **Japanese:** 21.30–22.00 on 5985/7060/9760kc, 12.30–13.00 & 14.00–14.30 on 9760/11760kc – **Cantonese:** 09.00–09.30 on 9760/11760kc,

14.00–14.30 on 1240/9840/11840kc – **Korean:** 09.00–09.30 & 14.00–14.30 on 1240/9840/11840kc – **Thai:** 05.30–06.00, 12.00–12.30 on 1240/9840/11840kc – **Cambodian:** 09.30–10.00 on 9760/11760kc, 12.30–13.00 on 1240/9840/11840kc – **Indonesian:** 09.30–10.00 on 1240/9840/11840kc, 13.30–14.00 on 9760/11760kc – **Standard Chinese:** 04.30–05.00 & 11.30–12.00 on 1240/9840/11840kc.
ANN: E: "This is the Voice of Vietnam. broadc. from Hanoi, Capital of the Democratic Republic of Vietnam" – V. by QSL-card, Prgr. schedules, pamphlets, pennants free. Recordings accepted.

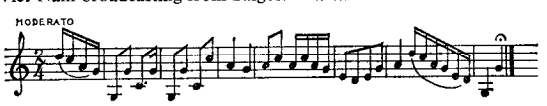
VIETNAM (Republic)

L.T: GMT+8 h – **Pr.L:** Vietnamese
RADIO VIETNAM, VTVN (Radio Broadcasting System of Vietnam)
ADDR: 3 Phan-Dinh-Phung Str, Saigon. **Te:** 25935. **Cable:** VTVN
L.P: Dir. Gen: Vu Duc Vinh Asst. Dir.Gen: H. van Phan. Dir.Adm: Le Quang Phung. Dir. Tec: Tran Cong Than Dir. Prgr: Vu Duc Minh

STATIONS Saigon (G.C: 106.40E/10.37N)

kc	m	kW	Prgr.	kc	m	kW	Prgr.
610	491	20/60	B	4877	62.51	80/20	A
740	405	10/10		6165	48.66	200/20	A
820	366	1	AFRS	7245	41.41	20	B
870	345	50/200	A	9620	31.19	200/50	A
1090	275	1/1	C	9755	30.76	10	C

HOME SCE: Prgr. A (Vietnamese): 24h. **N:** Every h on the h – **Prgr. B:** 22.00–02.00, 03.30–07.00, 09.00–16.00. **Vietnamese** (Forces Prgr's): 22.00–24.00. 03.30–05.00, 09.00–14.00 **N:** (dictation) 06.15–07.00 – **Chinese:** 00.00–02.00, 05.00–06.15, 14.00–14.30. **N. in English:** W 14.30–15.30 – **Prgr. C:** 21.58–24.00, 04.00–05.00, 10.15–13.00. **English** 23.30–24.00, 12.00–12.30 (N. dictation), 12.30–13.00. **French** 11.00–12.00. **Cambodian** 04.30–05.00, 10.15–11.00 – **Thai:** 23.30–24.00 – **LL: English** 22.30–23.00 (in Vietnamese), 04.15–04.30 (in French). **French** 04.00–04.15 – **AFRS Prgr** (in English only): 24 h –
ANN: Vietnamese: "Dây là Tiêng Nói Núoc Viêt-Nam phát thanh tu Thudo Saigon" F: "Ici VTVN, La voix de la république du Viet-Nam, émettant de Saigon". E: "This is VTVN, the Voice of the Republic of Viet-Nam broadcasting from Saigon" – **INT-SIG:** Cither solo.



V. by QSL-card or letter. Rp. Recordings accepted.

REGIONAL STATIONS: G.C: Dalat 108.23E/11.45N; Nhatrang 109.10E/12.15N; Huế 107.40E/16.25N.

Location	kc	m	kW	Location	kc	m	kW
Huê	650	461.5	20/100	Huế	1490	201.0	1
Banmethout	690	434.8	50/100	Dalat	1440	208.0	1/1
Baxuyen	780	385.0	10	Banmethout	4810	62.37	50
Quang Ngai	800	375.0	10	Dalat	6116	49.05	5
Nhatrang	970	371.5	10	Da Nang	7265	41.29	5
Da Nang	1090	275.0	10	Huê	9670	31.02	5
Quynhon	1250	240.0	1	Nhatrang	9720	30.86	0.2

Huê: 19.15–00.00, 03.25–06.30, 08.55–15.15 – **Banmêthuôt:** 21.00–02.00, 04.00–16.30 – **Baxuyên:** 22.00–15.15 – **Quang Ngai:** 21.30–00.30, 02.00–06.00, 08.00–16.00 – **Dalat:** 22.20–00.02, 03.30–06.00, 07.15–14.00 – **Nha Trang:** 22.30–00.05, 03.30–05.30, 09.45–15.00 – **Quy Nhon:** 22.30–00.05, 04.00–05.15, 10.00–14.05 – **Da Nang:** 22.00–24.00, 04.00–05.30, 10.30–14.15.

PROVINCIAL STATIONS:

Location	kc	m	kW	Location	kc	m	kW
Quang Nam	1420	211.2	0.05	Dinh Tuong	1200	150.0	0.05
Phu Yên	1400	214.3	0.05	Kiên Hoa	710	422.5	0.05
Long An	670	447.7	0.05				

Quang Nam: 22.30–00.30, 03.30–06.30, 10.00–14.00 – **Phu Yên:** 22.30–00.30, 03.45–05.45, 11.00–14.00 – **Long An:** 22.25–01.00, 03.55–05.30, 10.55–13.00 – **Dinh Tuong:** 22.27–00.20, 03.58–05.30, 10.58–13.30 – **Kiên Hoa:** 22.25–00.30, 03.57–05.30, 10.57–13.30.

VOICE OF AMERICA R. STATION IN VIETNAM
ADDR: Voice of America, Washington 20547, DC, USA.
STATION: Huê 760kc 50kw: 11.00–16.30 Vietnamese.

YEMEN

L.T: GMT+3 h – **Pr.L:** Arabic.
RADIO SANAA (Gov.)
ADDR: Sanaa – **L.P:** Dir. Gen: A. Sarham. Dir. Tec: H. Magdi.
STATIONS: 881kc 10kW – 5804kc 51.70m 25kW.
HOME SCE. in Arabic: 03.00–06.00, 11.00–15.00, 16.00–22.00 (approx) – **N:** 04.00, 12.00, 17.00, 19.45.
ANN: "Huna San'aa" – **V.** by letter. Rp.

PACIFIC

AUSTRALIA (Commonwealth of)

L.T: Ea. Austr: GMT+10 h, So. Austr: GMT+9½ h, We. Austr: GMT+8 h – **Pr.L:** English.

AUSTRALIAN BROADCASTING COMMISSION (ABC)
Constituted under the Broadc. and TV-Act 1942–63. The Australian National Broadc. Sce. prgr's are the responsibility of the ABC which is responsible to the Postmaster General. The technical sce's in Radio and TV studios are provided by the ABC Engineering Dept: the tr's are operated by the Postmaster General's Department.
ADDR: Head Office: 145 Elizabeth St, Box 487 G.P.O. Sydney. **Cable:** ABCOM. **Te:** 31-0211.
L.P: Chmn: Dr. J. R. Darling, C.M.G, O.B.E. Gen. Mgr: T. S. Duckmanton. Dep. Gen. Mgr: C. W. Semmler. Asst. Gen. Mgr: W. S. Hamilton. Asst. Gen. Mgr (Gen.): A. N. Finlay. Contr. of Prgr's: N. Hutchison. Contr. of N: J. G. Oakley. Contr. of Techn. Sce's: V. Kenna. Contr. of Management Sce's: P. A. Dorrian. Dir. Overseas Sce's: P. W. R. Homfray. European Representative: E. K. Sholl, 54 Portland Place, London W.1, England. North American Representative: Ch. Buttrose, Suite 2708, 1270 Avenue of the Americas, New York 20, N.Y, USA. South-East Asian Representative: J. Hollinshead, 302 Orchard Road, Singapore 9. Indonesian Representative: Ph. Koch, Apt. 35 Djalan Kebon Sirih 40, Djakarta. Indian Representative: A. A. Cane, 116 Sunder Nagar, New Delhi. Japanese Representative: N. H. Petersen, Tokyo. Malaysian Representative: A. H. Cooke, Room 705, Asia Insurance Bldg, Jalan Weld, Kuala Lumpur.

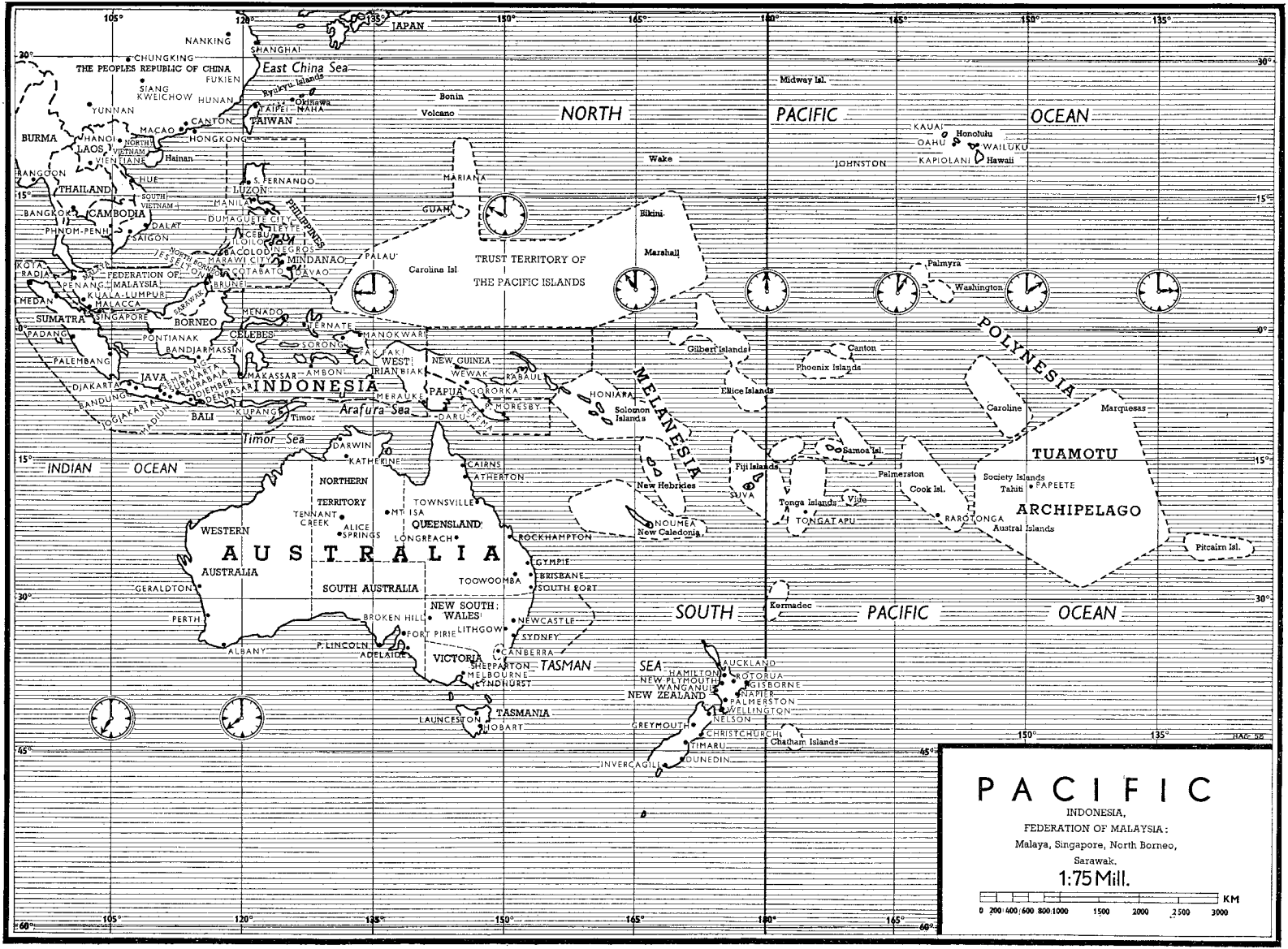
THE NATIONAL BROADCASTING SERVICE

MEDIUM WAVE SERVICE: [1]=Metropolitan. [2]=Regional. Stations in fat types are relayed on shortwave.

Call	kc	kW	Location	
Australian Capital Territory				
2CY[1]	850	10	Canberra	a)
2CN[1]	1540	2	Canberra	b)
New South Wales				
2CR[2]	550	50	Orange	a)
2ML[2]	560	0.2	Murwillumbah	a)
2FC[1]	610	50	Sydney	a)
2NU[2]	650	10	Tamworth	a)
2CO[2]	670	10	Albury	a)
2KP[2]	680	10	Kempsey	a)
2NR[2]	700	50	Grafton	a)
2TR[2]	720	0.2	Taree	a)
2BL[1]	740	50	Sydney	b)
2NB[2]	760	1	Broken Hill	c)
2AN[2]	760	0.05	Armidale	a)
2BA[2]	810	10	Bega	a)
2GL[2]	820	10	Glen Innes	a)
2NC[2]	1230	10	Newcastle	b)
2NA[2]	1510	10	Newcastle	a)
2LG[2]	1570	0.2	Lithgow	a)
2WN[2]	1580	2	Wollongong	a)
2UH[2]	1040	1	Muswellbrook	a)
2CP[2]	1570	0.05	Cooma	a)
Victoria				
3VW[2]	580	50	Horsham	a)
3AR[1]	620	50	Melbourne	a)
3LO[1]	770	50	Melbourne	b)
3GI[2]	830	10	Sale	a)
3WL[2]	1570	0.2	Warrnambool	a)
Queensland				
4QL[2]	540	10	Longreach	a)
4QR[1]	590	50	Brisbane	b)
4AT[2]	600	2	Atherton	b)
4QN[2]	630	50	Townsville	a)
4QW[2]	710	10	St. George	a)
4QA[2]	720	2	Mackay	a)
4QS	750	10	Toowoomba	a)
4QG[1]	790	10	Brisbane	a)
4RK[2]	840	10	Rockhampton	a)

Call	kc	kW	Location	
4QB[2]	910	10	Maryborough	a)
4QO[2]	910	10	Eidsvold	a)
4QY[2]	940	2	Cairns	a)
4MI[2]	1080	0.2	Mount Isa	a)
4QD[2]	1550	50	Emerald	a)
4GM[2]	1570	0.2	Gympie	a)
4SO[2]	1590	0.2	Southport	a)
South Australia				
5CK[2]	640	10	Port Pirie	c)
5CL[1]	730	50	Adelaide	c)
5AN[1]	890	10	Adelaide	d)
5PA[2]	1160	2	Penola	c)
5LN[2]	1530	0.2	Port Lincoln	c)
5WM[2]	1580	0.05	Woomera R. Range	c)
5MG[2]	1580	0.2	Mt.Gambier	c)
5MV[2]	1590	2	Renmark	c)
Western Australia				
6DL	530	10	Dalwallinu	e)
6WA[2]	560	50	Wagin	e)
6NM[2]	600	0.2	Northam	e)
6AL[2]	650	0.4	Albany	e)
6WF[1]	690	50	Perth	f)
6CA	720	0.2	Carnavon	e)
6GF[2]	660	2	Kalgoorlie	e)
6WN[1]	810	10	Perth	e)
6GN[2]	830	2	Geraldton	e)
6ED[2]	840	1	Esperance	e)
Tasmania				
7ZL[1]	600	10	Hobart	a)
7QN[2]	630	0.4	Queenstown	a)
7NT[2]	710	10	Launceston	a)
7ZR[1]	940	10	Hobart	b)
Northern Territory				
8DR[2]	650	2	Darwin	c)
8KN[2]	670	0.05	Katherine	c)
8TC[2]	680	0.05	Tennant Creek	c)
8AL[2]	1530	0.05	Alice Springs	c)
Papua/New Guinea				
9PA	1250	2	Port Moresby	b)
9RB	810	2	Rabaul	g)

a) 20.00(Sun 20.30)–14.07; b) 20.00(Sun 20.30)–14.00; c) 20.00(Sun 20.30)–14.37; d) 20.00(Sun 20.30)–14.30; e) 22.00(Sun 22.30)–16.07; f) 22.00(Sun 22.30)–16.00; g) 20.00(Sun 20.30)–03.45, 06.15–12.45.


PACIFIC
INDONESIA,
FEDERATION OF MALAYSIA:
Malaya, Singapore, North Borneo,
Sarawak.
1:75 Mill.
KM
0 200 400 600 800 1000 1500 2000 2500 3000
NORTH PACIFIC OCEAN
SOUTH PACIFIC OCEAN
INDIAN OCEAN
TRUST TERRITORY OF THE PACIFIC ISLANDS
MELANESIA
POLYNESIA
TUAMOTU ARCHIPELAGO
AUSTRALIA
INDONESIA
TASMAN SEA
East China Sea
Timor Sea
Arafura Sea
THE PEOPLES REPUBLIC OF CHINA
JAPAN
TAIWAN
BURMA
LAOS
THAILAND
CAMBODIA
SUMATRA
BORNEO
CELEBES
JAVA
BALI
PHILIPPINES
MINDANAO
PAPUA
NEW GUINEA
WEST IRIAN
NEW ZEALAND
TASMANIA
VICTORIA
NEW SOUTH WALES
QUEENSLAND
SOUTH AUSTRALIA
WESTERN AUSTRALIA
NORTHERN TERRITORY
Midway Isl.
Bonin
Volcano
Wake
Bikini
Marshall
Caroline Isl
Palmyra
Washington
Gilbert Islands
Canton
Phoenix Islands
Ellice Islands
Solomon Islands
New Hebrides
New Caledonia
Fiji Islands
Samoa Isl.
Tonga Islands
Palmerston
Cook Isl.
Caroline
Marquesas
Society Islands
Tahiti
Austral Islands
Pitcairn Isl.
Kermadec
Chatham Islands
Hawaii
Honolulu
Hainan
Ryukyu Islands
Okinawa
Palau
Timor
Bangkok
Hanoi
Rangoon
Singapore
Kuala Lumpur
Malacca
Penang
Pontianak
Bandjarmassin
Makassar
Djakarta
Bandung
Jogjakarta
Madiun
Surabaja
Denpasar
Kupang
Manila
Cebu
Davao
Manokwari
Rabaul
Gororka
Merauke
Darwin
Katherine
Cairns
Atherton
Townsville
Mt Isa
Tennant Creek
Alice Springs
Longreach
Rockhampton
Gympie
Brisbane
Toowoomba
South Port
Newcastle
Sydney
Canberra
Broken Hill
Port Pirie
Lithgow
Sheppartton
Melbourne
Lyndhurst
Adelaide
P. Lincoln
Albany
Perth
Geraldton
Hobart
Launceston
Auckland
Hamilton
Rotorua
New Plymouth
Wanganui
Gisborne
Napier
Palmerston
Wellington
Nelson
Greymouth
Christchurch
Timaru
Dunedin
Invercagill
Nanking
Shanghai
Chungking
Fukien
Siang
Kweichow
Hunan
Yunnan
Canton
Macao
Hongkong
Hanoi
Vientiane
Hue
Bangkok
Phnom-Penh
Dalat
Saigon
Kota Radja
Medan
Padang
Palembang
Djakarta
Bandung
Jogjakarta
Madiun
Surabaja
Denpasar
Kupang
Manila
Cebu
Davao
Mindanao
Bacolod
Ilo Ilo
Mariana
Guam
Palau
Honolulu
Kauai
Oahu
Wailuku
Kapiolani
Johnston
Tonga Islands
Tongatapu
Vite
Suva
Rarotonga
Papeete
Tahiti
Noumea
Kerema
Darwin
Gerald
Albany
Perth
Hobart
Launceston
Sarawak
Sabah
Brunei
Bandjarmassin
Pontianak
Menado
Ternate
Sorong
Pak Pak
Biak
Wewak
Rabaul
Gororka
Merauke
Darwin
Kathering
Cairns
Townsville
Mt Isa
Longreach
Rockhampton
Gympie
Brisbane
Toowoomba
South Port
Newcastle
Sydney
Canberra
Lithgow
Broken Hill
Port Pirie
Adelaide
Sheppartton
Melbourne
Lyndhurst
Hamilton
Rotorua
Wanganui
Gisborne
Napier
Palmerston
Wellington
Nelson
Christchurch
Timaru
Dunedin
Invercagill
Kerema
Darwin
Gerald
Albany
Perth
Hobart
Launceston
105° 120° 135° 150° 165° 180° 165° 150° 135°
30° 15° 0° 15° 30° 45° 60°

NEWS: **20.00** (2CY, 2FC, 2NR, 3WV, 7ZL, 7ZR); **20.30** (2FC, 2NR, 3WV, 4QN, 7ZL); **20.45** (2CY, 2NR, 2BL, 3WV, 4QR, 5CL, 7ZR); **21.00** (4QN, 5CL); **21.15** (2FC, 7ZL); **21.45** (2CY, 2NR, 2BL, 3WV, 4QR, 5AN, 7ZR); **22.00** (2CY, 2NR, 4QN, 6WA, 6WF, 6WN); **22.15** (5CL); **22.30** (6WA); **22.45** (6WA, 6WF); **23.15** (6WN); **23.45** (6WA, 6WF); **00.00** (6WA); **00.25** (2CY, 2NR, 2BL, 3WV, 4QR, 5AN, 6WA, 6WF, 7ZR); **01.00** (6WA, 6WN); **02.30** (2CY, 2FC, 2NR, 3WV, 6WA, 6WN, 7ZL); **03.00** (2BL, 4QR, 5CL, 6WF, 7ZR); **03.30** (2CY, 2FC, 2NR, 3WV, 7ZL); **03.45** (4QN, 5CL); **04.00** (5AN); **04.30** (6WA, 6WN); **06.00** (2CY, 2FC, 2NR, 3WV, 5CL, 6WA, 6WN, 7ZL); **08.53** (2CY, 2NR, 3WV, 4QN); **09.00** (2CY, 2FC, 2NR, 2BL, 3WV, 4QR, 5CL, 5AN, 6WN, 7ZL, 7ZR); **10.00** (6WA); **11.00** (2CY, 2NR, 3WV, 6WA, 6WN); **12.00** (2FC, 5CL, 7ZL); **13.00** (2CY, 2FC, 2NR, 3WV, 5CL, 6WA, 7ZL); **14.00** (2CY, 2FC, 2NR, 3WV, 6WN, 7ZL); **14.30** (5CL); **15.00** (6WA); **16.00** (6WA).

DOMESTIC SHORT WAVE SERVICE

ADDR: Sydney: A.B.C, Box 487, G.P.O – Melbourne: A.B.C, Box 1686, G.P.O – Brisbane: A.B.C, Box 293 E, G.P.O – Perth: A.B.C, Box 190 D, G.P.O – Port Moresby: A.B.C, Box 76, Port Moresby.

STATIONS: G.C: Sydney (150.54E/33.57S): VLI (2kW) – Melbourne (145.25E/37.20S): VLH & VLR (10kW) – Brisbane (153.01E/27.19S): VLQ & VLM (10kW) – Perth (115.49E/31.51S): VLW (10kW) & VLX (50kW) – Port Moresby (147.08E/09.27S): VLT & VLK (10kW).

Call	kc	m	h of tr.	
VLI6	6090	49.26	W: 20.00–14.07	Sun: 20.30–14.07
VLH11	*11880*	25.25	W: 20.00–22.45	Sun: 20.30–22.15
VLH15	15230	19.70	W: 23.00–08.15	Sun: 22.30–08.15
VLH9	9680	30.99	W: 08.30–14.07	Sun: 08.30–14.07
VLR6	6150	48.78	W: 20.00–22.15	Sun: 22.30–22.45
			08.30–14.00	08.30–14.00
VLR9	9680	30.99	W: 22.30–08.30	Sun: 23.00–08.30
VLQ9	9660	31.06	W: 20.00–14.07	Sun: 20.30–14.07
VLM4	4920	60.98	W: 20.00–14.07	Sun: 20.30–14.07
VLW6	6140	48.86	W: 22.00–24.00	Sun: 22.30–24.00
			10.30–16.07	10.30–16.07
VLW9	9610	31.22	W: 00.15–10.15	Sun: 00.15–10.15
VLX9	9610	31.22	as VLW6	
VLX15	15425	19.45	W: 00.15–10.15	Sun: 00.15–10.15
VLT4	4890	61.35	W: 20.00–22.00	Sun: 20.30–22.00
			07.30–14.00	07.30–14.00
VLT9	9520	31.51	W: 22.15–07.15	Sun: 22.15–07.15
VLK3	3925	76.43	as VLT4	
VLK4	4890	61.35	W: 22.15–07.15	Sun: 22.15–07.15

VLR relays 3LO, VLH relays 3AR, VLI takes N.S.W. regional prgr's, VLQ and VLM takes Queensland regional prgr's, VLW and VLX takes We. Australian regional prgr's, VLT and VLK relay 9PA.

N: 20.00(not Sun), 20.30(not Sun), 20.45, 21.15(Sun 21.30), 21.45 (Sun 23.00), 00.25(not Sat/Sun), 02.30, 03.30, 06.00(not Sun), 09.00, 11.00(not Sat), 13.00(BBC & Aust), 14.00 – **Wrp:** included in N, also 22.45(Sun), 02.40(Sat), 02.45(Mon–Fri), 03.48(Mon–Fri), 08.28(Sun), 08.55(Sat) – **T.S:** on the h.

NOTE: Although times are in GMT, calendar days apply to the Ea. States of Aust. only.

ANN: "This is the A.B.C..." – **INT-SIG:** Three Gongs (C.F.A.)

V. by QSL-card and letter. Re. to ABC in capital city of state in which st. is located – **PUB:** "TV Times", "ABC R. Guide", R. Australia Prgr. Guide, Schools Broadcasts booklets, Boyer Lectures.

FI: By annual appropriation from Commonwealth Gov's budget – **ALF:** A$ 5.50.

OVERSEAS SERVICE – RADIO AUSTRALIA

ADDR: Radio Australia, P.O. Box 428G, G.P.O, Melbourne. Cable: Newscast. Te: 676911.

TRANSMITTERS: The Tr's of STC, AWA and RCA, manufacture are located at Shepparton (145.25 E/36.20 S) – 4×100kW, 2×50kW and 1×10kW, and Lyndhurst (145.16 E/38.03 S) – 1×10kW, and are capable of operating on any freq. allocated for international broadc. in the 13, 16, 19, 25, 31, 41 and 49 m.b.

NOTE: Radio Australia in common with all international broadc.st's has no assigned freq's, but is allocated certain freq's for use during definite periods.

SERVICES: *I:* So, So. Ea, So. We. As. *II:* Ea. As, No. Pacific Isl. *III:* So. Pacific Isl. *IV:* Mid-Pacific Isl. *V:* British Isles, Eu. *VI:* No. America (Ea). *VII:* No. America (We). *VIII:* Af.

TRANSMISSIONS: October 1966–April 1967

Freq's in fat types 100kW; * 10kW; others 50kW.

English:		kc	English:		kc
I:	22.14–22.45	**15220**		09.30–14.30	11880, **9570**
	22.45–01.00	**17870, 15220**		14.30–17.30	**9570, 7220**
	01.00–08.00	21540, **17870**	II:	20.59–23.00	17715, 15240
	08.00–08.30	**17870**		23.00–00.15	15240
	08.30–09.30	**17870, 15220**		08.59–10.00	**11810**
		11880		11.00–12.12	**11810, 9580**
English:		**kc**	**Indonesian**		**kc**
III:	18.00–21.15	**15330**	I:	22.30–00.30	**11780, 15330**
	06.45–09.15	**11710**, 9560		06.30–08.30	**17820, 15220**
IV:	18.00–21.15	**11840**		10.00–11.30	**11740, 7220**
	00.29–06.45	15240*	**Japanese**		
	06.59–12.12	7190*	II:	10.00–11.00	**11810, 9580**
V:	08.14–09.15	**11710**, 9560	**Mandarin**		
VI:	12.14–13.15	11710*	I:	11.30–13.30	**11740, 7220**
	01.00–03.00	**17840, 15220**	**Cantonese**		
VII:	01.00–03.00	**17840, 15220**	I:	13.30–14.30	**11740, 7220**
VIII:	03.30–05.15	**17820, 15220**	**Vietnamese**		
French				12.30–13.30	**11790, 9540**
I:	23.15–00.15	17715	**Thai**		
IV:	05.15–06.15	15180*, **11710**	I:	13.30–14.30	**11790, 9540**
VIII:	05.15–06.15	**17820, 15220**			

Freq. are subject to alteration. Details of alterations are given in the tr's concerned for three days before the effective date and in "Transmission Parade" and "DX-ers Calling".

FIXED PROGRAMMES in English:

N: 00.15, 01.30, 02.30, 03.45, 04.00, 04.45, 05.00, 06.00, 07.00, 08.45 (23/10–18/3), 09.00, 10.00, 11.00, 12.00, 13.00, 14.00, 15.00, 16.00, 17.00, 18.00, 19.00, 20.00, 21.00, 21.45, 22.45, 23.30 – **Mailbags:** Pacific/Asia/Africa Edition: Sat 18.30, 21.15, Sun 01.00, 04.00, 05.30, 11.30, 16.30; European Edition: Sun 07.00 (08.30 23/10–12/3); No. America Edition: Sun 12.30, Mon 01.10.

DX Programme: Sat 19.30(III, IV), 22.00(II), Sun 05.00(VIII), 09.00 (V) (*April–October* 07.30), 13.00(VI), 15.30(I+V), Mon 02.45(VI+VII) – **Request Prgr: Listener's Choice:** Sun 11.10, D 14.30. **Music by Request:** Sun 00.30, W 00.40. **Sport:** Results W 08.30. Descriptions and results of major sports events in Australia Sat 02.30–07.30 on 21540kc to I – **Stock Exchange:** 09.15, 13.06, Sat 01.45.

National Music: Music by Australian artists and composers is broadc. regularly in all tr's – **Prgr. Previews:** A preview is given at the start of each daily tr. and three min. before the close of tr. to the resp areas. **Transmission Parade:** Fri 20.40, 22.10, Sat 05.45, 14.25.

FIXED PROGRAMMES in other languages:

FRENCH: N: 23.30, 05.30 – **Commentary:** Tues–Sat 23.42, 05.42. **Mailbag:** *Sun 00.00, 05.45.*

INDONESIAN: N: 23.15, 00.15, 06.45, 08.00, 10.10, 11.00 – **Breakfast Session:** D 22.32 – **Mailbag:** Sun 07.15, 10.30 – **"English Lessons for Indonesians":** Tues, Thurs 07.00, 10.30.

JAPANESE: N: 10.30 – **Mailbag:** Sun 10.10 – **DX-Session:** Sun 10.45. **Commentary:** *Mon–Fri 10.42.*

MANDARIN: N: 11.45, 13.15 – **Commentary:** Mon–Fri 11.57 – **Mailbag:** Sun 12.30.

CANTONESE: N: 14.00 – **Commentary:** Mon–Fri 14.12 – **Storyteller:** Sat 13.40.

THAI: N: 14.00 – **Commentary:** Mon–Fri 14.15 – **Mailbag:** Sun 13.45· **English Lessons for Thailand:** Fri 13.32.

VIETNAMESE: N: 13.00 – **Commentary:** Mon–Fri 13.15 – **Mailbag:** Sun 12.40.

ANN: "This is R. Australia transmitting the Overseas Service from the Melbourne studios of the A.B.C." – "You are tuned to R. Australia, the Overseas Service of the A.B.C." Freq's are given at frequent intervals.

TUNING AND INT-SIG: Celeste playing "Waltzing Mathilda" for five min. preceding prgr's to all areas: Prgr's commence with chimes of *Melbourne Post Office Clock and the laugh of the Australian bird*, the Kookaburra – **V:** Listeners reports are welcomed and correct reports are confirmed by verification card – **PUB:** A prgr. booklet is available free upon application. – **F.PL:** 3×250kW tr's for 1967.

PRIVATELY OWNED COMMERCIAL BROADCASTING STATIONS

Associated in a body called: **Federation of Australian Commercial Broadcasters. ADDR:** Box 7024 G.P.O. Sydney – **Te:** 29-1738. **Cable:** AFOBS – **L.P:** Federal Dir: E. L. Sommerlad. Exec. Secretary: H. M. Goodsall. Also Promotion and Research Organization "Australian Radio Advertising Bureau", 47 York Str., Sydney. **Te:** 29-1738. **The Australian Broadcasting Control Board** is a Go. Authority responsible for the planning of the broadc.sce's ensuring that technical equipment and prgr.sce's are of adequate standards and determining power, frequency and periods of operating of st's. **Addr:** 373 Elizabeth Str, Melbourne, C.1. **Cable:** Conboard. **Te:** 30-4321 – **L.P:** Chmn: M. F. E. Wright. Secr: J. A. McNamara. Dir. Tec: A. J. McKenzie. Dir. Prgr: D. A. Jose.

2CH is controlled by the New South Wales Council of Churches, **2SM** by the Roman Catholic Church, **5KA** and **5AU** by the Methodist church.

Abbreviations: Amalg=Amalgamated, Ass=Associated, Me=Melbourne, B.Casters=Broadcasters, Transc=Transcontinental.

DAILY PROGRAMMES IN: INDONESIAN, VIETNAMESE, CANTONESE, MANDARIN, JAPANESE, THAI, FRENCH, ENGLISH
RADIO AUSTRALIA
OVERSEAS SERVICE OF THE AUSTRALIAN BROADCASTING COMMISSION

RADIO AUSTRALIA

Free programme guide available from Radio Australia, Box 428G, Melbourne, Australia
Cable Address: Newscast, Melbourne. Telex: RACAST/AA30551

Note: Times quoted are GMT, but refer to local calender days.
St's with no time indication operate 24 h.

NEW SOUTH WALES: Call letter: 2—.

	Call	kc	kW	Times		Call	kc	kW	Times
1)	KM	530	2(d)	a	20)	DU	1250	2	b12
2)	BH	660	0.2	c	21)	SM	1270	5	
3)	KA	780	2	a7	22)	TM	1290	2	b1
4)	GB	870	5		23)	LF	1340	2	c4
5)	LM	900	2/1	c1	24)	NX	1360	2	b
6)	XL	920	2/1		25)	LT	1370	0.5	b13
7)	UE	950	5		26)	GN	1380	2	c3
8)	GZ	990	2	c2	27)	PK	1400	2	c3
9)	KY	1020	5		28)	KO	1410	2	
10)	CA	1050	2	b	29)	WL	1430	2	z2
11)	RG	1070	2/1	c3	30)	MW	1440	2	b14
12)	MO	1080	2	c4	31)	MG	1450	2	c6
13)	UW	1110	5		32)	NM	1460	0.5	b
14)	AD	1130	2	c5	33)	BE	1480	1	
15)	HD	1140	2		34)	AY	1490	2	c7
16)	WG	1150	2	b3	35)	BS	1500	2	c7
17)	CH	1170	5	b9	36)	QN	1520	2	c8
18)	NZ	1190	2	b10	37)	VM	1530	2/0.5	a3
19)	GF	1210	2	b11	38)	RE	1560	2	b2

VICTORIA: Call letter: 3—.

	Call	kc	kW	Times		Call	kc	kW	Times
39)	UL	530	2(d)	b15	48)	SR	1260	2	a4
40)	UZ	930	5		49)	AW	1280	5	**
41)	BO	960	2	b4	50)	BA	1320	2	b9
42)	HA	1000	2	a1	51)	SH	1330	2	c3
43)	DB	1030	5		52)	GL	1350	2	b17
43)	LK	1090	2	b5	53)	XY	1420	5	
44)	CS	1130	2(d)	c9	54)	CV	1440	2	a5
45)	KZ	1180	5	b16	55)	MA	1470	2	c2
46)	YB	1210	2	b15	56)	AK	1500	5	*
47)	TR	1240	2		57)	NE	1600	2/1	a4

QUEENSLAND: Call letter: 4—.

	Call	kc	kW	Times		Call	kc	kW	Times
58)	KQ	690	2		69)	BC	1120	2	
59)	TO	780	2	b18	70)	MB	1160	2	b2
60)	GR	860	2	b2	71)	AK	1220	2	a5
61)	WK	880	2/1	c10	71)	BK	1300	2	a5
62)	VL	920	2/1	c11	72)	NA	1320	2	b6
63)	AY	960	2	b1	73)	BU	1330	2	b12
64)	RO	1000	2	b19	74)	GY	1350	2/1	b7
65)	CA	1010	2	c4	75)	LM	1370	2	c12
66)	IP	1010	2	b20	76)	MK	1380	2	b8
67)	SB	1060	2	c10	77)	BH	1390	2(d)	a6
68)	LG	1100	2	b6	78)	ZR	1480	2/1	c13

SOUTH AUSTRALIA: Call letter: 5—.

	Call	kc	kW	Times		Call	kc	kW	Times
79)	RM	800	2	c14	81)	AD	1310	2	
80)	DN	980	2		81)	SE	1370	0.5	c16
81)	PI	1040	2	c15	83)	AU	1450	2(d)	c16
82)	KA	1200	2		81)	MU	1460	2/1	c17

WESTERN AUSTRALIA: Call letter: 6—.

	Call	kc	kW	Times		Call	kc	kW	Times
84)	VA	780	2	h	85)	PM	1000	2	g
85)	AM	860	2	g	85)	GE	1010	2	g
86)	PR	880	2	f	87)	WB	1070	2	h
87)	BY	900	2	h	87)	IX	1080	2	
88)	NA	920	2	h1	87)	MD	1100	2	h
89)	TZ	960	2	f2	89)	CI	1130	2	f3
85)	KG	980	2	g	88)	KY	1210	2	

TASMANIA: Call letter: 7—.

	Call	kc	kW	Times		Call	kc	kW	Times
90)	SD	540	2	f	94)	AD	900	0.5	d
91)	BU	560	2	c9	95)	EX	1010	2	***
92)	QT	720	0.5	e	96)	HT	1080	2	b
93)	HO	860	2	a6	97)	LA	1100	2	b22

NORTHERN TERRITORY: Call letter: 8—.

	Call	kc	kW	Times
98)	DN	1240	2	c5

* 16/4–15/8: 21.00–07.00; 16/8–15/10: 21.00–08.00; 16/10 15/2: 20.00–09.00; 16/2–15/4: 20.00–08.00 – ** 18.30(Sun 19.30)–15.00; *** 18.45–14.00; a=19.00(Sun 20.30)–13.30(Sun 12.15); a1=19.00 (Sun 21.30)–13.30(Sat 14.00, Sun 12.30); a2=19.00(Sun 20.00)–14.00(Sun 13.00); a3=19.00(Sun 20.30)–14.00(Sat 15.00, Sun 13.00);

a4=19.30(Sun 21.00)–13.30(Sat 14.00, Sun 13.00); a5=19.00(Sun 20.00)–13.00(Sat 14.00); a6=19.00–14.05; a7=19.00–12.30.

b=19.30(Sun 20.00)–14.00; b1=19.30(Sun 20.00)–13.30; b2=19.30–13.00(Sat 14.00); b3=19.30(Sun 21.00)–14.00(Sun 13.00); b4=19.30 (Sun 21.00)–14.00(Sun 13.30); b5=19.30(Sun 21.00)–15.00; b6=20.00(Sun 22.00)–12.00(Sat 14.00, Sun 12.30); b7=19.30–12.15; b8=19.30–12.30; b9=19.30(Sun 22.00)–14.00(Sun 13.00); b10=19.30(Sun 21.00)–13.00(Sat 14.00, Sun 12.30); b11=19.30(Sun 21.00)–13.45; b12=19.30(Sun 20.00)–14.00(Sat 15.00, Sun 13.15); b13=19.30(Sun 21.30)–12.30(Sun 12.00); b14=19.30(Sun 22.00)–13.00 (Sun 12.00); b15=19.30(Sun 21.00)–13.30(Sat 14.00); b16=19.30–13.30 (Sat 15.00); b17=19.30(Sun 22.00)–13.00(Sat 13.30, Sun 12.30); b18=19.30(Sun 20.30)–13.30(Sat 14.00); b19=19.30(Sun 20.00)–13.00(Sun 12.30); b20=19.30(Sun 21.00)–12.30(Sat 13.30); b12=19.30(Sun 21.45)–12.30(Sun 12.00); b22=19.30(Sun 21.30)–14.00 (Sun 13.00).

c=20.00(Sun 22.00)–13.00(Sun 12.00); c1=20.00(Sun 22.00)–13.30 (Sat 14.00); c2=20.00–12.30; c3=20.00(Sun 21.00)–13.00; c4=20.00–13.05(Sun 13.00); c5=20.00–13.30; c6=20.00(Sat 21.00, Sun 21.30)–12.30(Sat 14.00); c7=20.00(Sun 21.00)–13.30(Sat 14.00, Sun 13.00); c8=20.00(Sun 21.30)–12.30(Sat 13.00, Sun 12.00); c9=20.00 (Sun 22.00)–12.30(Sat 13.00); c10=20.00(Sun 21.00)–12.30; c11=20.00(Sun 21.30)–12.30(Sat 14.00, Sun 12.00); c12=20.00(Sun 22.00)–13.00(Sat 14.00, Sun 12.15); c13=20.00(Sun 22.00)–12.30; c14=20.00 (Sun 22.30)–13.30(Sat 14.30); c15=20.00(Sun 22.15)–13.45(Sat 14.30, Sun 13.30); c16=20.00(Sun 22.15)–13.30(Sat 14.30); c17=20.00(Sun 22.15)–14.30(Sun 13.30).

d=20.30(Sun 22.30)–13.00(Sun 12.30); e=20.45–03.00, 06.00–12.30; f=21.00–17.00; f2=21.00(Sun 22.45)–15.00(Sat 16.00, Sun 14.30); f3=Mon–Fri 21.00–06.30, 09.00–14.30; Sat 21.00–15.00; Sun 22.45–14.30; g=21.30–16.00. h=22.00–14.30; h1=22.00–16.00.

1) **Kempsey Ltd**, P.O. Box 136, West Kempsey. **Cable:** "2KM". **Te:** 2236. **L.P:** Mgr: L. B. Harte. N on the h & 21.45, 08.30. **Ann:** "2KM the twin tower st". **V.** by QSL-card. **Rp.**

2) **Broadc. St. 2BH**, P.O. Box 432, Broken Hill. **L.P:** Mgr: H. D. Morgan. Dir. Tec: R. E. Wright. **N:** 21.30, 02.30, 08.15, 12.30. **Ann:** "R. Silver City". **V.** by QSL-card. **Rp.**

3) **Transcontinental Broadc. Corp. Ltd**, Rural Bank Bldg, Katoomba. **L.P:** St. Mgr: A. Marinato. **Ann:** "Voice of the Mountains". **V.** by letter. **Rp.**

4) **Broadc. St. 2GB Pty. Ltd**, 136 Phillip St, Sydney, N.S.W. **Te:** 20360. **L.P:** Mgr: D. L. Foster. Dir. Tec: L. N. Schultz. **N:** every h on the h. **Ann:** "Number one in Sydney". **V.** by QSL-card.

5) **Richmond River B. Casters Pty Ltd**, Bruxner Highway, Goonellabah, Lismore. **Te:** 2351. **L.P:** Mgr: P. le Brun. Dir. Tec: H. Green. **D.Prgr:** English/Italian Fri 21.30, Sun 04.30. **N:** 20.30, 21.30, 22.30, 02.00, 08.30, 12.00. **Ann:** "The Voice of Summerland". **V.** by letter. **Rp.**

6) **Cooma B. Casters Pty Ltd**, Box 58, Cooma. **Te:** 21233. **L.P:** Man. Dir: J. S. Scott. **N:** 20.00, 20.45, 21.45, 22.08, 00.25, 16.00, 09.00, 09.15, 13.00 & hourly 14.00–19.00. **V.** Prepared card and reply postage required for QSL.

7) **2UE Sydney Pty Ltd**, 237 Miller St, No. Sydney.

8) **Country Broadc. Sces Pty Ltd**, P.O. Box 465, Orange. **L.P:** Mgr: A. Ridley. **N:** on the h. **Ann:** "2GZ Central New South Wales". **V.** by letter.

9) **Broadc. St. 2KY**, Orwell St, Potts Point. (Owned by the Labour Council of New South Wales). **Te:** 35.3055. **L.P:** Mgr: L. R. Hood. Dir. Tec: L. A. Spinner. **N:** every h on the h. **Ann:** "2KY in Centre of Your Radio Dial". **V.** by QSL-card. **Rp.**

10) **Canberra B.Casters Pty Ltd**, Box 163 City, Canberra. **Te:** 41234. **L.P:** Mgr: P. R. Carrodus. Dir. Tec: H. T. Beazley. **N.** at 19.30 then every h. **Italian:** Sat 09.00–09.30. **Ann:** "2CA the Two State Station". **V.** by QSL-card.

11) **2RG B.Casters Pty Ltd**, Ulong St, Griffith. **Te:** 877. **L.P:** Mgr: W. R. Gamble. Dir. Tec: S. Savage. **N:** every h on the h 20.00–13.00 and at 20.30, 21.30, 22.30, 02.30, 08.30. **Ann:** "2RG Griffith". **V.** by letter.

12) **2MO Gunnedah Pty Ltd**, P.O. Box 62, Gunnedah. **L.P:** Mgr: L. Worms. **N:** every h on the h 20.00–12.00 and at 21.30, 02.30, 08.30. **V.** by letter. **Publ:** Prgr. schedule free.

13) **Commonwealth Broadc. Corp Pty Ltd**, 365 Kent St, Sydney, N.S.W. **L.P:** Gen. Mgr: L. C. Hynes. **N.** every h on the h. **V.** by letter.

14) **New England B.Casters Pty Ltd**, 123 Rusden St, Armidale. **L.P:** Mgr: R. V. Brislan.

15) **Airsales Pty Ltd**, Maitland St, Sandgate. **Te:** 68 3611. **L.P:** Mgr: O. J. Story. **N:** half hourly. **Greek:** Sun 21.20. **Italian:** Sun 21.30. **Ann:** "First in Newcastle". **V.** by QSL-card.

16) **Riverina B.Casters (Holdings) Pty Ltd**, 16 Fitzmaurice St, Wagga Wagga. **Te:** 2124. **L.P:** Mgr: J. L. McCormick. Dir. Tec: R. Abraham. **N:** on the h and at 20.30, 21.30, 22.30, 02.30. **Ann:** "R. Riverina". **V.** by letter.

17) **Broadc. St. 2CH**, 47 York St, Sydney (Owned by N.S.W. Council of Churches, operated by Amalgamated Wireless (Australasia) Ltd.) **Te:** 293322. **L.P:** Mgr: H. R. Huntley. Dir. Tec: R. R. Davis. **V.** Reports not wanted.

18) **Northern B.Casters Pty Ltd**, P.O. Box 3, Inverell. **Te:** 1101. **L.P:** Mgr: J. W. Twyford. Dir. Tec: B. H. Mason. **N:** 21.30, 02.00, 09.00. **Ann:** "2NZ, Northern New South Wales". **V.** by letter. **Rp.**

19) **Grafton Broadc. Co. Ltd**, P.O. Box 276, Grafton. **Te:** 964. **L.P:** Mgr: K. J. Armour. Dir. Tec: W. Rowe. **N:** On the h & 19.30, 19.33, 20.30, 21.30, 22.30, 02.30, 03.30, 08.30. **Ann:** "Voice of the Pacific Beautizone". **V.** by letter. Recordings accepted. **Rp. Pub:** Prgr. schedule free.

20) **Western B.Casters Pty Ltd**, P.O. Box 44, Dubbo. **Te:** 3214. **L.P:** St. Mgr: R. Ferguson. Dir. Tec: M. H. Weiland. **N:** every h. **Ann:** "The st. with the Exciting Sound". **V.** by QSL-card.

21) **Broadc. St. 2SM Pty Ltd**, G.P.O. Box 4092, Sydney. **Te:** 29.5381. **L.P:** Gen. Mgr: W. H. Stephenson. Dir. Tec: D. Marshall. **N:** On the h and half h 19.00–14.00, on the h 14.00–19.00. **Italian:** Sun 11.15–13.30. **Maltese:** Sun 11.00–11.15. **Ann:** "Good Guy Radio". **V.** by QSL-card.

22) **Tamworth R. Development Co. Pty Ltd**, P.O. Box 497, Tamworth. **Te:** 59274. **L.P:** Mgr: K. Knapp. Dir. Tec: O. E. Bartle. **Ann:** "This is 2TM, Northern New South Wales". **V.** by QSL-card, **Rp.**

23) **Young B.Casters Pty Ltd**, 24 Lovell St, Young. **Te:** 27. **L.P:** Mgr: J. H. Finlayson. Dir. Tec: E. Eastley. **N:** Summaries (hourly) & 21.30, 02.30, 08.30. **Ann:** "2LF, the friendly St." **V.** by QSL-card. Recordings accepted. **Rp.** for return of tapes only.

24) **Hunter B.Casters Pty Ltd**, 56 Hunter St, Newcastle. **Te:** 21573. **L.P:** Mgr: K. C. Robinson. Dir. Tec: A. S. Mather. **N:** hourly. **Ann:** "2NX Newcastle". **V.** by QSL-card. **Rp.**

25) **Lithgow B.Casters Pty Ltd**, P.O. Box 21, Lithgow. **Te:** 3321. **L.P:** Mgr: F. Harper. Dir. Tec: A. McInante. **N:** Every half h. **Ann:** "Gateway to the Central West". **V.** by QSL-card. **Rp.**

26) **Goulburn Broadc. Co. Pty Ltd**, McKell Place, Goulburn. **Te:** 21.3377. **L.P:** Mgr: D. O'Reilly. Dir. Tec: G. Sangster. **N:** every h on the h. **Ann:** "2GN, Your Southern Tablelands St". **V.** by letter, **Rp.**

27) **Parkes Broadc. Co. Pty Ltd**, P.O. Box 112, Parkes. **Te:** 62 1122. **L.P:** Mgr: N. T. Spicer. Dir. Tec: G. F. Carter. **N:** half hourly 20.00–23.00, hourly 00.00–close, also at 21.30, 08.30. **Ann:** "Voice of the Golden West". **V.** by letter. **Rp.**

28) **R. 2KO Newcastle Pty Ltd**, P.O. Box 300, Newcastle. **Te:** 23836. **L.P:** Mgr: C. J. Derwin. Dir. Tec: M. Spitzkowsky. **N:** Every half h at 19.00–23.00, hourly 23.00–14.00. **Ann:** "R. 2KO Newcastle". **V.** by QSL-card.

29) **Wollongong B.Casters Pty Ltd**, Box 34, Wollongong. **Te:** 2-6726. **L.P:** Mgr: W. Gibson. Dir. Tec: A. J. Yeldon. **D.Prgr:** Music and serials. **Italian:** Sun 09.00–09.30. **N:** Every h and half h. **Ann:** "The New WL". **V.** by card and letter for detailed and accurate reports from listeners from outside N.S.W.

30) **Tweed Radio Broadc. Co. Pty Ltd**, P.O. Box 53, Murwillumbah. **Te:** 888. **L.P:** Mgr: W. G. Diamond. Dir. Tec: N. D. Carpenter. **N:** every h on the h. **Ann:** "2MW Murwillumbah, the Tweed and Gold Coast St". **V.** by QSL-card. **Rp.**

31) **Mudgee Broadc. Co. Pty Ltd**, Wellington Rd, Mudgee. **Te:** 21-777. **L.P:** Mgr: R. Camplin. Dir. Tec: J. Sullivan. **N:** Every h on the h 20.00–12.00; also 20.30, 21.30, 22.30, 08.30. **Ann:** "R. Wonderful". **V.** by QSL-card.

32) **Hunter B.Casters Pty Ltd**, 100 Bridge St, Muswellbrook. **Te:** 565, **L.P:** Mgr: S. O'Shea. Dir. Tec: A. Mather. **N:** half hourly 20.00–22.00 on the h 23.00–02.00, 03.30, on the h 04.00–08.00, 08.30, on the h 10.00–13.00, 13.55. **Ann:** "Voice of the Upper Hunter". **V.** by QSL-card. **Rp.**

33) **R. 2BE Pty Ltd**, P.O. Box 77, Bega. **L.P:** Gen. Mgr: J. A. Kerr. **V.** by letter. **Rp.**

34) **Amalgamated Wireless (A'asia) Ltd**, Dean St, Albury. **Te:** 213288. **L.P:** Mgr: E. J. Pattison. Dir. Tec: J. W. James. **N:** half hourly 20.00–22.00, on the h 22.00–01.00, 02.30, 03.30, on the h 04.00–07.00, 08.30, 10.00, 12.00, 13.00. **Ann:** "2AY, your two state st, serving Southern New South Wales and North Eastern Victoria". **V.** by letter. **Rp.**

35) **Bathurst B.Casters Pty Ltd**, 109 George St, Bathurst. **Te:** 3322.

The Australian Radio and TV authority

A COMPLETE reference library in ONE concise volume of 485 pages

BROADCASTING and TV YEAR BOOK

120,000 FACTS AND FIGURES

Australian radio and TV stations and networks, their rates and representatives; radio and TV survey organisations; radio and TV legislation and regulations; program standards; industry statistics; location and area maps; suppliers of programs and equipment; casting agencies; advertising agencies; national advertisers; trade associations; public relations consultants and research organisations' industry executives.

1967 EDITION AVAILABLE MARCH, 1967

PRICE $ (A) 11.50 PER COPY (including postage)

Order now direct from the publishers:

GREATER PUBLICATIONS PTY. LTD. BOX 2608, G.P.O., SYDNEY. AUSTRALIA.

L.P: Mgr: W. Touhey. Dir. Tec: R. Upfold. **N:** on the h. **Ann:** "Centre of the Golden West". **V.** by QSL-card.

36) **Southern Riverina B.Casters Pty Ltd,** 368 George St, Deniliquin. **Te:** 1131. **L.P:** Mgr: P. N. Charley. Dir. Tec: E. Scoones. **N:** Every half h 20.30–22.30, 02.30, 03.00, 03.30, 08.30. **Ann:** "2QN Deniliquin". **V.** by QSL-card. **Rp.**

37) **Moree Broadc. and Development Co. Ltd,** 93 Balo St, Moree. **Te:** 101. **L.P:** Mgr: R. Morrisby. Dir. Tec: R. Lasker. **N:** half hourly 19.00–22.30, hourly 23.00–14.00. **Ann:** "Radio 2VM". **V.** by letter.

38) **Manning Valley B.Casters Pty Ltd,** P.O. Box 275, Taree. **Te:** 11.00. **L.P:** Mgr: H. McCrindle. **N:** Every half h 19.30–22.30; every h 23.00–13.00. **Ann:** "Voice of the Mid North Coast". **V.** by QSL-card. **Rp.**

39) **Associated Broadc. Sce's Ltd,** P.O. Box 84, Warragul. **Te:** 21431. **L.P:** Mgr: C. McL. Cameron. Dir. Tec: A. K. McLennan. **N:** On the hour and at 02.30, 08.30. **Ann:** "3UL, Central Gippsland". **V.** by letter. **Rp.**

40) **Nilsens Broadc. Sce. Pty Ltd,** 45 Bourke St, Melbourne. **Te:** 63.3511. **N:** On the h and half h. **Ann:** "3UZ Melbourne". **V.** by QSL-card.

41) **Amalgamated Wireless (A'asia) Ltd,** Pall Mall, Bendigo. **Te:** 30661· **L.P:** Mgr: A. P. Scown. Dir. Tec: W. S. Moore. **N:** 19.30, 20.00, 20.30, 20.45, 21.30, 21.45, 22.30, 23.30, 00.30, 01.30, 02.30, 03.30, 04.30, 05.30, 06.30, 07.30, 08.00, 08.50, 12.00, 13.30. **Ann:** "3BO, No. 1 in Ce. Victoria". **V.** by letter. **Rp.**

42) **Victorian Broadc. Network Ltd,** 37 Gray St, Hamilton. **Te:** 316. **L.P:** Mgr: K. Barnes. Dir. Tec: E. Cunningham. **N:** 21.30, 02.30, 08.30, 12.00. **Ann:** "R. Western" or "First for Sport". **V.** by letter.

43) **The Herald Sun St's,** 61 Flinders Lane, Melbourne Cl. **Te:** 63-5451· **L.P:** Mgr: C. Crawford. Dir. Tec: E. M. Hooper. **N:** On the h. **Ann:** "3DB/3LK, the Herald-Sun Stations" (19.30–15.00), "Herald-Sun Radio 3DB" (15.00–19.30). **V.** by QSL-card.

44) **Colac B.Casting Co. Pty Ltd,** 241 Murray St, Colac. **Te:** 9061. **L.P:** Mgr: C. S. Faulkner. Dir. Tec: C. A. Cullinan. **N:** Tues–Sat 21.45, 22.05, 22.30, 02.30, 03.15*, 08.30, 11.00* (*=not Sat); Sun 22.45, 02.30, 08.30, 11.00; Mon 21.45, 02.30, 03.15, 08.30, 11.00. **Ann:** "Your Western District St". **V.** by QSL-card. **Rp.** essential.

45) **3KZ B.Casting Co. Pty Ltd,** 64 Elizabeth St, Melbourne. **Te:** 63 6311. **L.P:** Mgr: L. J. Hyle. Dir. Tec: B. M. Perry. **D.Prgr: Requests** 09.00–11.00 exc. Mon. **Greek:** Sun 11.30–12.30, Mon 09.30–10.30, Thurs 10.00–11.00. **N:** every h on the h. **Ann:** "3KZ, the st. with the Million Dollar Sound". **V.** by QSL-card. **Rp.**

46) **Associated Broadc. Sces. Pty Ltd,** P.O. Box 255, Warrnambool· **Te:** 8088. **L.P:** Mgr: J. Walker. Dir. Tec: S. G. Green. **Ann:** "3YB, the st. with the happiest listeners". **V.** by QSL-card. **Rp.**

47) **V.B.N. Ltd,** Stawell St, Sale.

48) **Associated Broadc. Sces. Ltd,** P.O. Box 205, Shepparton. **Te:** 9151. **L.P:** Mgr: E. Collings. Dir. Tec: R. Jenks. **N:** On the hour. **Ann:** "3SR, Heart of Victoria". **V.** by QSL letter. Recordings accepted.

49) **R. Melbourne 3AW,** 374 Latrobe Str, Melbourne. **Te:** 3296666. **L.P:** Gen. Mgr: R. Fowell. Dir. Tec: R. Kinley. **N:** 21.00, 21.30, 02.30, 08.30, 14.00. **Ann:** "Radio Melbourne, 3AW". **V.** by letter.

50) **Ballarat B.Casters Pty Ltd,** Box 360, Ballarat. **Te:** 2-5068. **L.P:** Gen. Mgr: E. J. W. Whykes. Dir. Tec: E. K. Ridgeway. **N:** On the h exc. 22.00; also at 21.30, 22.30, 02.30, 12.30, 13.30. **Ann:** "3BA Ballarat". **V.** by QSL-card. **Rp.**

51) **V.B.N. Ltd,** P.O. Box 504, Swan Hill. **Te:** 22768. **L.P:** Mgr: H. Lithgow. Dir. Tec: B. Walsh. **N:** 21.30(not Sun), 22.45(Sun), 02.30, 02.45, 08.30, 12.00(not Sat). **Ann:** "R. 3SH, the Central Voice of the Murray Valley". **V.** by QSL-card.

52) **Geelong B.Casters Pty Ltd,** 4 James St, Geelong. **Te:** 9-4131· **D.Prgr:** "Continental Cabaret" (Ukrainian, Russian, Yugoslav· German, Polish, music and languages): Sun 04.00. **N:** 20.45, 21.45, 02.30, 09.00, 12.00, 12.45 + headlines on the h. **Ann:** "3GL, the Geelong Advertiser st". **V.** by QSL-card.

53) **Efftee B.Casters Pty Ltd,** 222 Faraday St, Melbourne. **Te:** 34-5191· **L.P:** Mgr: R. J. Baeck. Dir. Tec: W. Chamberlain. **D.Prgr:** Greek & Italian alternate days 10.00–13.00 (Mon–Fri). **N:** On the h. **Ann:** "The st. with the Happy Difference". **V.** by QSL-card. Recordings accepted.

54) **V.B.N. Ltd,** P.O. Box 79, Maryborouth, Victoria. **L.P:** St. Mgr: Ken J. Parker. **V.** by letter. **Rp.**

55) **Sunraysia B.Casters Pty Ltd,** P.O. Box 539, Mildura, Victoria. **L.P:** St. Mgr: M. Folie. **V.** by letter.

56) **General TV Corporation,** P.O. Box 100, Richmond. **Te:** 42-0201. **L.P:** Gen. Mgr: N. Dick. Dir. Tec: R. J. Biddle. **N:** On the h and half h. **Ann:** "3AK, the Voice of Television City". **V.** by QSL-card.

57) **Wangaratta Broadc. Co. Pty Ltd,** P.O. Box 167, Wangaratta. **Te:** 2051. **L.P:** Mgr: D. C. de la Rue. Dir. Tec: K. T. Gleeson. **D.Prgr: Italian** Wed 11.00. **DX-Prgr: "World at Your Fingertips"** Sun 12.35 **N:** half hourly to 23.00, then hourly. **Ann:** "Voice of the North East" **V.** by letter.

58) **Labour Broadc. St. Pty Ltd,** P.O. Box 398F, Brisbane. **Cable:** Fourq. **L.P:** Mgr: L. W. Beioley. **N:** 21.45, 22.45, 00.25, 02.30, 03.30, 06.00, 07.00, 12.00, 13.10, 14.00. **V.** by letter.

59) **Amalgamated Wireless (A'asia) Ltd,** Stanley St, Townsville. **Te:** 4165. **L.P:** Mgr: K. Duncan. Dir. Tec: G. S. Ericksson. **N:** 20.00, 20.45, 21.25, 21.45, 22.25, 00.00, 02.30, 02.45, 03.45, 06.00, 08.00, 09.00, 12.30, 13.00. **Ann:** "4TO, the Townsville st." **V.** prepared card from listeners.

60) **Broadc. St. 4GR,** 453 Ruthven St, Toowoomba. **Te:** 2-3333. **L.P:** Mgr: R. J. Stevenson. Dir. Tec: R. H. Hildred. **N:** 19.30*, 20.00, 20.30*, 20.45*, 21.00(Sun), 21.30*, 21.45*, 22.00, 22.30*, 22.45, 01.20**, 02.15(Sat), 02.30(not Sat), 04.30**, 05.55**, 08.00**, 09.00, 11.00*, 10.00**, 12.00. *) not Sun; **) not Sat/Sun. **Ann:** "The Modern Sound of Radio". **V.** by letter. QSL-card being prepared.

61) **Warwick Broadc. Co. Pty Ltd,** Palmerin St, Warwick. **Te:** 8. **L.P:** Mgr: W. O. Kinane. Dir. Tec: R. van Poecke. **N:** 20.45, 21.45, 22.00, 02.30, 13.00, 08.30, 09.00. **Ann:** "The South Queensland st". **V.** by letter.

61) **Charleville Broadc. Co. Ltd,** P.O. Box 84, Charleville. **Te:** 221. **L.P:** Mgr: W. D. Eversen. Dir. Tec: F. W. Davidson. **N:** 20.15* (Su only), 20.30*, 21.45*, 23.00(Sun), 02.30, 09.00. *) not Sun. **Ann:** "Voice of the Far South West". **V.** by QSL-card.

63) **Ayr B. Casters Pty Ltd,** P.O. Box 880, Townsville. **Te:** 4191. **L.P:** Mgr: G. T. Schmid. Dir. Tec: J. Oost. **N:** 20.45, 21.15, 21.45, 22.27, 02.30, 02.45, 03.45, 08.30, 09.00. **Ann:** "4AY, the Voice of the North, on Tall Tower Power". **V.** by letter. **Rp.**

64) **Rockhampton Broadc. Co. Pty Ltd,** East St, Rockhampton. **Te:** 2-2541. **L.P:** Mgr: E. J. Rheuben. Dir. Tec: E. C. Semfel. **N:** 21.45 (not Sun), 22.45(Sun), 02.15(Sat only), 02.30(not Sat/Sun), 09.00. **Ann:** "4RO, the Voice of Capricornia". **V.** by QSL-card & letter.

65) **Amalgamated Wireless (A'asia) Ltd,** Shields St, Cairns. **L.P:** St. Mgr: J. B. Powell.

66) **So. Queensland Broadc. Corp. Pty Ltd,** P.O. Box 165, Ipswich. **Te:** 81-2677. **L.P:** Mgr: A. W. Brandt. Dir. Tec: W. G. Dodd. **D.Prgr: Italian:** Mon–Fri 11.00, Sun 10.30. **N:** 20.00, 20.15, 20.45, 21.15, 21.45, 00.30, 02.30, 04.30, 05.55, 09.00, 12.00. **Ann:** "Colour Radio 4IP, the st. with the Happy Difference". **V.** by letter.

67) **So. Burnett Broadc. Co. Pty Ltd,** P.O. Box 305, Kingaroy. **Te:** 202. **L.P:** Mgr: G. Parker. Dir. Tec: B. Whitnall. **N:** 20.00, 20.45, 21.45, 01.00, 02.30, 05.30, 06.00, 07.00, 07.45, 09.00, 11.00, 12.00. **Ann:** "4SB South Burnett". **V.** by QSL-card. **Rp.**

68) **Ce. Queensland Broadc. Corpo,** Box 20, Longreach. **Te:** 224. **L.P:** St. Mgr: I. Elstob. Dir. Tec: G. Nixon. **N:** 20.03, 20.45, 21.45, 02.30, 03.30, 06.00, 09.00, 11.00. **Ann:** "Colour Radio 4LG, R.4LG the st. with the happy difference". **V.** by letter. Recordings accepted.

69) **Commonwealth Broadc. Corp. (Q'ld) Ltd,** Wharf St, Brisbane· **Te:** 31-1311. **L.P:** Mgr: M. E. W. Baker. Dir. Tec: N. J. Bishop· **N:** 23.00, 20.45, 21.45, 01.00, 02.30, 04.00, 05.55, 09.00, 11.00, 12.00, 14.00. **Ann:** "Most People Listen to 4BC". **V.** reports not wanted·

70) **Maryborough Broadc. Co. Ltd,** 363 Kent St, Maryborough, Queensland. **L.P:** St. Mgr: G. W. Robertson.

71) **Brisbane Broadc. Pty,** 93 Queens St, Brisbane. **Te:** 31-1381. **L.P:** Gen. Mgr: H. I. Marshall. Dir. Tec: J. Kinsford. **N:** 19.30, 20.00, 20.25, 20.45, 21.45, 02.30, 04.30, 05.45, 09.00, 11.00, 12.00. **Ann:** "4BK Brisbane, 4AK Darling Downs". **V.** by QSL-card. **Rp.** Recordings accepted.

72) **Maroochy Broadc. Co. Ltd,** 161 Currie St, Nambour. **Te:** 1099. **L.P:** St. Mgr: R. J. Taylor. Dir. Tec: A. E. Bidgood. **N:** 20.00, 20.45, 21.05, 21.45, 00.25, 02.30, 03.30, 09.00, 11.00. **Ann:** "4NA Nambour, the Sunshine Coast St." **V.** by letter. **Rp.**

73) **Bundaberg B. Casters Pty Ltd,** P.O. Box, 105 Bundaberg. **Te:** 2478. **L.P:** Mgr: N. McCormack. Dir. Tec: H. Clayton. **N:** 20.00, 20.45, 21.45, 02.30, 03.30, 09.00, 11.00. **Ann:** "4BU Bundaberg". **V.** by QSL-card.

74) **Gympie Broadc. Co. Ltd,** 98 Mary St, Gympie. **L.P:** St. Mgr: A. H. Buzacott. **V.** by letter. **Rp.**

75) **No. Queensland Broadc. Corp. Pty Ltd,** P.O. Box 432, Mount Isa. **Te:** 316. **L.P:** Mgr: G. Atthow. Dir. Tec: A. Smith. **D.Prgr: German:** Sun 08.00. **Italian:** Sun 07.30. **N:** 20.00, 21.45, 22.45, 02.30, 03.30, 09.00, 11.00. **Ann:** "Colour Radio 4LM". **V.** by letter. **Rp.**

76) **Mackay Broadc. Sce. Pty Ltd,** 38 Gordon St, Mackay. **L.P:** Gen. Mgr: M. E. Low. **Ann:** "The Voice of the Barrier Reef". **V.** by QSL-card.

77) **B. Casters (Aust) Pty Ltd,** G.P.O. Box 906M, Brisbane. **Te:** 22002. **L.P:** Mgr: N. Llewelyn. Dir. Tec: A. Judge. **N:** hourly. **Ann:** "4BH Brisbane, Key st. of the Macquarie Broadc. Netw." **V.** by letter.

78) **Maranoa Broadc. Co. Ltd**, P.O. Box 22, Roma. **Te:** 80585. **L.P:** Mgr: C. R. Taylor. **N:** 22.45(not Sun), 02.30, 09.00. **Ann:** "This is your feature st, 4ZR". V. by QSL-card.

79) **River Murray B. Casters Pty Ltd**, P.O. Box 118, Berri. **Te:** 80. **L.P:** Mgr: L. J. Bradley. Dir. Tec: H. F. Lloyd. **N:** hourly on the h. **Ann:** "The Voice of the Murray". V. by QSL-card.

80) **Hume B. Casters Ltd**, 201–205 Tynte St, No. Adelaide. **L.P:** St. Mgr: J. S. Larkin. **N:** Every h on the half h.

81) **Advertiser Broadc. Network**, G.P.O. Box 392, Adelaide. **Te:** 51-0425. **L.P:** Mgr: J. Sutton. Dir. Tec: J. L. Schaumloffel. N. On the h and half h. exc. 03.30–06.30 & 15.00–19.00. **Ann:** "St. 5AD, ch 1310". V. by QSL-card. (Rel. st's: 5PI Crystal Brook, 5SE Mount Gambier, 5MU Murray Bridge).

82) **5KA B. Casters Pty Ltd**, 43 Franklin St, Adelaide. **Te:** 51-5511. **L.P:** Mgr: K. R. Parham. Dir. Tec: G. E. Mathews. **N.** 30 min' past each h. **Ann:** "5KA City". V. by QSL-card. Rp.

83) **Broadc. St. 5AU**, P.O. Box 247, Port Augusta. **Te:** 2941. **L.P:** Mgr: N. W. Bradley. Dir. Tec: B. E. Martin. **D.Prgr:** Relay 5AD exc. for some local prgr's. **Ann:** "The Voice of the North". V. by QSL-card and/or letter. Rp.

84) **Albany B. Casters Pty Ltd**, 167 York St, Albany. **Cable:** Sixva. **L.P:** St. Mgr: T. Furlong. V. by letter.

85) **Whitford's Broadc. Network**, 115 St. George's Terrace, Perth. **Te:** 21-2201. **L.P:** Mgr: D. E. Muir. Dir. Tec: H. A. Taylor. **N:** Every 20 min. **Ann:** "Ch 10". V. by QSL-card. Rp. (Relay st's: 6AM Northam, 6KG Kalgoorlie, 6GE Geraldton).

86) **Nicholson's Broadc. Sce**, 340 Hay St, East Perth.

87) **West Australia B. Casters Pty Ltd**, 38 Mounts Bay Rd, Perth. **L.P:** Mgr: J. T. Hunn. Dir. Tec: C. H. Muhling. **N:** Usually 5 min before the h. V. by letter. Rp. (St's: 6BY, 6WB, 6IX, 6MD).

88) **Westland B. Co. Ltd**, 17–19 James St, Perth. **Te:** 28-1525. **L.P:**. Mgr: J. W. Hugall. Dir. Tec: K. J. Cantelo. **N.** Every h on the h V. by QSL-card. Rp.

89) **Broadc. St. 6TZ**, 7 Wittenoom St, Bunburry. **Te:** 2183. **L.P:** Mgr: P. Nash. Dir. Tec: C. Robson. **N.** on the h. **Ann:** "R. Centre of the South West". V. Prepared card and Rp required for verification. (Rel. St: 6CI).

90) **No. Ea. Tasmania R. B. Casters Pty Ltd**, P.O. Box 109, Scottsdale. **L.P:** Mgr: B. Scetrine. V. by QSL-card.

91) **Burnie Broadc. Sce. Pty Ltd**, P.O. Box 120, Burnie. **Te:** 31-2555. **L.P:** Mgr: T. Lord. Dir. Tec: C. H. Trethewey. V. Reports not wanted.

92) **West Coast B. Casters Pty Ltd**, P.O. Box 315, Queenstown. **L.P:** Mgr: H. Ebrall. V. Reports not wanted.

93) **Comm. B. Casters Pty Ltd**, G.P.O. Box 542F, Hobart. **Te:** 80321. **L.P:** Mgr: A. B. Brown. Dir. Tec: R. M. McCarthy. **N:** Every h on the h and at 19.30, 20.30, 21.30, 22.30, 02.30, 03.30, 08.30. **Ann:** "The Big Sound". V. by QSL-card or letter. Recordings accepted.

94) **No. Tasmania B. Casters Pty Ltd**, 48 Rook St, Devonport. **Te:** 22412. **L.P:** Mgr: M. Evans. Dir. Tec: B. Eyre. **N:** 21.45, 22.07, 02.30, 08.45, 12.00. V. by QSL-card. Rp.

95) **7EX Pty Ltd**, Watchorn St, Launceston. **Te:** 42492. **L.P:** Mgr: H. Prince. Dir. Tec: R. J. Abraham. **N:** Every h. **Ann:** "The Top St". V. Prepared card required.

96) **Metropolitan B. Casters Pty Ltd**, G.P.O. Box 572F, Hobart. **Te:** 33157. **L.P:** Mgr: J. V. Howell. Dir. Tec: F. B. Klein. **N:** 20.00, 20.55, 00.25, 02.30, 06.00, 09.00, 11.00, 12.00, 13.00, 13.55. **Ann:** "7HT the Heart of Hobart". V. by letter.

97) **Findlay & Wills B. Casters Pty Ltd**, The Quadrant, Launceston. **Te:** 2-1551. **L.P:** Mgr: R. E. Ward. Dir. Tec: R. B. CmLean. **N:** Every half h at 19.45–21.45, 22.30, 00.30, 02.30, 03.30, 05.30, 08.45, 11.00, 12.00, 13.00. **Ann:** "The Number One Station". V. by QSL-card.

98) **Darwin B. Casters Pty Ltd**, 16 Smith St. West, Darwin. **L.P:** St. Mgr: D. H. Charlton. V. by letter. Rp.

COOK ISLANDS (N.Z. Territory)

L.T: GMT−10½ h – **Pr.L:** English, Maori.

RADIO COOK ISLANDS (Gov.)

ADDR: Rarotonga. **Te:** 100 – **L.P:** Officer in charge: P. F. Henderson. Dir. Tec: S. Kingan.

STATIONS: (G.C: 159.48W/21.11S): mw=0.15kW, sw=0.25kW.

Call	kc	m	Call	kc	m	Call	kc	m
ZK1ZA	820	365.9	ZK5	5045	59.46	ZK4	11760	25.51
ZK6	3265	91.87	ZK3	9695	30.94			

HOME SCE. in English, Maori: Mon–Fri 22.30–23.30 on 820/9695/11760kc, Tues–Sat 04.30–08.30 on 820/3265/5045kc.

N: English: 22.45, 04.32, 07.30 (rel. R. New Zealand) 07.40(Tues), 08.15(Thurs), 07.40(Sat). **Maori:** 22.55, 05.30.

ANN: "This is ZK1ZA R. Cook Islands" – **INT-SIG:** Cook Islands Drum Beats – V. by QSL-card. Rp.

FIJI (British)

L.T: GMT+12 h – **Pr.L:** English, Fijian, Hindustani.

FIJI BROADCASTING COMMISSION

(Independent Statutory Body, 50% comm. 50% cultural).

ADDR: P.O. Box 334, Suva. **Cable:** Broadcom. **Te:** 22621 – **L.P:** Chmn: D.M.N. Mc Farlane, LLB, C.B.E/Mgr: G.M. Cullen. Dep. Mgr: G.H. King. Prgr. Organiser: P.B. Sloan. Adv.Mgr: G. Bezar. Dir. Tec: T.C. Agar.

STATIONS: (G.C: 178.40E/18.10S) *)Sat 11.00.

kc	m	kw	L	h of tr.
710	422	5	English	18.00–10.30*
890	337	2.5	Eng./Hindi	18.00–10.30*
930	323	3	Vernaculars	18.00–10.30*
840	357	1	English	04.00–10.30*
1320	227	1	English	18.00–03.45
3230	93.00	10	English	20.00–00.00
3284	91.35	10	Vernaculars	03.35–10.30*
3935	76.24	0.4	English	03.50–10.30*
3980	75.38	0.4	Vernaculars	03.35–10.30*
4756	63.08	10	English	18.00–03.45
4785	62.70	10	Vernaculars	18.00–03.30
5955	50.39	0.4	English	18.00–03.45
6005	49.96	0.4	Vernaculars	18.00–03.30

HOME SERVICE: In English, Fijian and Hindustani: W 18.00–10.30 (Sat. 11.00), Sun 18.00–10.30. **English: N:** 18.15, 19.00 (BBC), 19.45, 20.00 (BBC), 01.00 (R.NZ), 01.30 (R. Australia) 07.00 (BBC), 09.00 (ABC) – **Local N. in Fijian:** W 18.15, 19.45, 01.15, 07.10 – **Wrp:** 19.00, 20.00, 01.30, 07.00 – **ANN:** "This is R. Fiji". Fijian: "Oqo na R. Fiji". Hindustani: "Yeh R. Fiji Hai" – **INT-SIG:** Beat of Fijian Lali (Log Drum) – V. by QSL-card – **FI:** by license payments and adv – **ALF:** £ 1/5/0

GILBERT and ELLICE ISLANDS (British Colony)

L.T. GMT+12 h – **Pr.L:** English, Gilbertese, Ellice.

GILBERT AND ELLICE ISLAND BROADCASTING SERVICE (Gov.)

ADDR: Broadc. Office, Betio, Tarawa. **Cable:** Broadcasts – **L.P:** Dir: R.K.Uatioa.

STATIONS: VTW 844kc 355.5m 0.05kW – VTW2 4912.5kc 61.07m 2kW.

HOME SCE. in Gilbertese and Ellice: D exc. Thurs & Sat: 04.30–06.00 (Sun 06.30). **English:** Sun–Thurs: 18.45–20.00.

ANN: E: "Good evening (afternoon) listeners, this is the Voice of Tarawa". Gilbertese: "Kam na bane ni mauri ara taan kakauongo n te bakantaai aei, aio bon Banaan Tarawa". Ellice: "Talofa katoa koutou i te fakaafiafi nei, mea nei ko te Sikungaleo o Tarawa" – **INT-SIG:** Four notes gong – V. by form letter – **ALF:** Austr. £ 0.50.

GUAM (U.S. Territory)

L.T: GMT+10 h – **Pr.L:** English, Chamorro, Philippine dialects.

RADIO GUAM (Pr. Comm.)

ADDR: P.O. Box 368 Agana, Guam. **Cable:** Kuam. **Te:** 7961 – **L.P:** Pres: H. Scott Kilgore. Vice Pres. & Gen. Mgr: W. B. Nielsen. Res. Mgr: E. A. Olson.

STATION: KUAM 610kc 1kW – **HOME SCE. in English:** 20.00 (Sun 21.00)–14.00(Sat 15.00) – **N:** Every h on the h.

ANN: "Kuam Agana, Guam" – **INT-SIG:** Voice & Jingle Form (Orchestra & Voices) – V. by letter and QSL-card – **PUB:** Prgr. schedule free. Write to: Resident Mgr. P.O. Box 368 Agana, Guam.

HAWAII (U. S. State)

VOICE OF AMERICA RADIO STATION IN HAWAII

ADDR: Washington D.C 20547 USA.

STATIONS: Honolulu 100kW: 21.30–00.30, 09.00–16.30.

kc	m	kc	m	kc	m	kc	m
5975	50.21	15120	19.84	15150	19.80	17705	16.94
11850	25.32						

(G.C: 158.11W/21.25N) – **English:** 22.00–22.30, 23.00–23.30, 00.00–00.30, 09.00–12.30, 13.30–16.30.

Private Stations:

Call	kc	kW	Network	Call	kc	kW	Network
1) KMVI	550	1	PBN	12) KTRG	990	5	Indep.
2) KGBM	590	5	PBN	13) KHVH	1040	5	Indep.
3) KORL	650	10	Indep.	14) KHAI	1090	5	Indep.
4) KULA	690	10	Indep.	15) KIPA	1110	1	AI
5) KUAI	720	5	AI	16) KLEI	1130	1	Indep.
6) KGU	760	10	AI	17) KOHO	1170	1	Indep.
7) KONA	790	1	AI	18) KZOO	1210	1	
8) KIKI	830	0.25	Indep.	19) KNDI	1270	5	Indep.
9) KIMO	850	1	Indep.	20) KNUI	1310	1	AI
10) KAIM	870	5	Indep.	21) KPOI	1380	5	Indeo.
11) KAHU	940	10	Indep.	22) KTOH	1490	1	PBN
2) KPUA	970	1	PBN	23) KUMU	1500	1	Indep.

1) **Maui Publishing Co**, P.O. Box 550, Wailuku, Maui. **L.P:** Gen. Mgr: R.E. Mawson.
2) **Pacific Broadc. Co**, Box 1476, Piihonua, Hilo 96720. **L.P:** Gen. Mgr: Gene Erger; Box 581, Honolulu 96809. **L.P:** Pres & Gen. Mgr: Cecil Heftel(for KGMB)
3) **R. Hawaii Inc**, Box 8250, Honolulu 96815. L.P: Vice Pres. & Gen. Mgr: M.L. Hibdon.
4) **KULA Broadc. Co**, P.O. Box 1479, Honolulu 96815. **L.P:** Gen. Mgr: Gordon L. Jacobs.
5) **American Islands Broadc. Corp**, Box 720, Eleele, Kauai 96705. L.P: Pres. & Gen. Mgr: R.L. Gay, Jr.
6) **Communications Hawaii Inc**, P.O. Box 3110, Honolulu. L. P: Gen. Mgr: W.O. Paine.
7) **Maunaloa Broadc. Inc**, Box 816, Kealakekua, Kona. L.P: Gen. Mgr: V.L. Beach.
8) **KIKI Ltd**, 331-D Kamani St., Honolulu 96813. L.P: St. Mgr: R.V. Howard.
9) Hugh V. Garrabrant, Box 1497, Hilo.
10) **Christian Broadc. Assoc**, P.O. Box 375, Honolulu 96810. L.P: Gen. Mgr: C. Keur
11) **Royal Hawaiian Radio Inc**, P.O. Box 1007, Waipahu 96797. L.P: St. Mgr: H.E. Chu.
12) **Hawaiian Paradise Park Corp**, 2227-A Kalakaua Ave, Honolulu 96815. L.P: Gen. Mgr: David Watumull
13) **Western Telestations Inc**, 1290 Ala Moana, Honolulu 96814. L.P: Pres. & Gen. Mgr: Lawrence S. Berger.
14) **Royal Broadc. Co, Inc**, 2259 Kalakaua Ave, Honolulu 96815. L.P: Gen. Mgr: R. L. Bowen.
15) **Big Island Broadc. Co**, P.O. Box 1602, Hilo. L.P: Gen. Mgr: E. Marion Sexton. Dir. Tec: R. W. Jaderstrom.
16) **Egal Radio**, 502 Kaliua Road, Kailua 96734. L.P: Gen. Mgr. J. Irvin.
17) **Cosmopolitan Broadc. Co**, 1140-A 12th Ave, Honolulu 96816. L.P: Gen. Mgr: H. Sato.
18) **Polynesian Broadc. Inc**, 250 Ward Ave, Suite 209, Honolulu 96814. L.P: Gen. Mgr: Thomas Huriuchi
19) R. St. **KNDI**, P.O. Box 1516, Honolulu. L.P: Gen. Mgr: J. T. Ownby.
20) **KNUI Broadc. Co**, Box 1310, Wailuku, Maui. L.P: Gen. Mgr: R. D. Vaught.
21) **KPOI Broadc. Co**, 1701 Ala Wai Blvd, Honolulu 96815. L.P: Gen. Mgr: F. Hollinger.
22) **Kauai Broadc. Co**, Box 1748, Lihue, Kauai. L.P: Gen. Mgr: Duane B.
23) John Hutton Corp, 1148-12th Ave, Honolulu 96816. L.P: Gen. Mgr: J. Weiser, Jr.

NEW CALEDONIA (French)

L.T: GMT+11 h – **Pr.L:** French.
RADIO NOUMEA (Gov – ORTF)
ADDR: B. P. 327, Noumea. **Cable:** Radio Noumea. **Te:** 2856 – **L.P:** Dr. Le Leizour. Dir. Tec: G. Guesdon. Dir. N: M. T. Guinchard.
STATIONS (G. C: 166.26E/25.16S): 1420kc 211m 8kW – 3355kc 89.45m 4kW – 7170kc 41.84m 4kW.
HOME SCE. in French, Bichelamar (Pidgin), Wallisian: On 1420/3355kc: W 19.00-21.00, 23.30–02.00, 06.00–11.00; Sun 21.00–02.00, 06.00–11.00. On 7170kc: 23.30–02.00(Sun 21.00–02.00).
N. in French: 19.30, 20.00, 20.55, 00.00, 01.00, 07.00, 07.45, 10.55 – **Wrp:** 19.30, 19.55, 00.00, 01.00, 08.00, 09.00, 10.55 – **For New Hebrides:** *Thurs* 07.00–07.30 – **ANN:** "*Ici Noumeá, Office de Radiodiff. Télévision Francaise*" – **INT-SIG:** Call of the cagou bird – **V.** by QSL-card. Rp. Recordings accepted – **AD:** 19.00–20.00, 00.00–01.00, 01.15–01.20, 07.30–07.45.

NEW HEBRIDES

L.T: GMT+11 h – **Pr.L:** English, French, Pidgin-English.
RADIO PORT VILA (Gov).
ADDR: Anglo-French Condominium Adm, Port Vila, New Hebrides, So. Pacific – **L.P:** Eng. in Chief: vacant.
STATIONS (G. C: 168.33E/17.44S): YJB3 3277kc 91.55m 1 kW YJB4 3905kc 76.83m 0.5kW – YJB7 7260kc 41.32m 0.5kW.
HOME SCE: Tues–Fri: 00.15–01.15 on 7260kc, 06.15–07.15 on 3905kc. Special broadc. may be outside above hrs. Tr's at 22.00–05.00 will be on 7260kc, between 05.00–08.00 3905kc.
Refer all communications regarding English prgr's to Inf. Officer British Residency, Vila, and regarding French prgr's to "Bureau d'Information", Residence de France, Port Vila.

NEW ZEALAND

L.T: GMT+12 h – **Pr.L:** English, Maori.
NEW ZEALAND BROADCASTING CORPORATION
(Statutory Public Body)

ADDR: P.O. Box 98, Wellington. **Cable:** Broadserv. **Te:** 48.200 – **L.P:** Dir. Gen: G. H. Stringer. Dir. of Engineering: W. L. Harrison. Dir. Sound Broadc: L. R. Sceats.

	Call	kc	m	kW	h of tr.
Wellington	2YA	570	526	100	24 h**
Napier	2YZ	630	476	20	18.00–11.20
Alexandra	4YX	640	468	2	18.00–11.20
Wellington	2YC	660	455	60	05.00–11.00
Christchurch	3YA	690	434	20	18.00–11.20
Invercargill	4YZ	720	416	20	18.00–11.20
Greymouth	3ZA	750	400	2	18.00–23.00
Auckland	1YA	760	395	20	18.00–11.20
Dunedin	4YA	780	384	20	18.00–11.20
Wellington	2YB	800	375	20	see below
Invercargill	4ZA	820	366	10	18.00–12.00
Masterton	2XB	840	357	2	18.00–10.30
Rotorua	1YZ	860	349	10	18.00–11.20
Auckland	1YC	880	341	10	05.00–11.00
Dunedin	4YC	900	333	10	05.00–11.00
Greymouth	3YZ	920	326	10	18.00–11.20
Palmerston No.	2ZA	940	319	2	18.00–12.00
Christchurch	3YC	960	312	10	05.00–11.00
Whangarei	1XN	970	309	2	18.00–11.00
Wellington	2ZB	980	306	20	18.00–12.00
Tauranga	1ZD	1000	300	10	18.00–10.30
Dunedin	4ZB	1040	288	10	18.00–12.00
Gisborne	2ZG	1060	283	2	18.00–11.00
Auckland	1ZB	1070	280	10	18.00–12.00
Christchurch	3ZB	1100	273	10	18.00–12.00
Wellington	2YD	1130	265	2	21.00–10.00
Hamilton	1YW	1140	263	2	18.00–11.20
Timaru	3XC	1160	258	2	18.00–11.00
Gisborne	2YW	1180	254	2	18.00–11.20
Wanganui	2XA	1200	250	2	18.00–11.00
Kaikohe	1XE	1220	245	2	18.00–11.00
Auckland	1YD	1250	240	2	21.00–10.00
Napier	2ZC	1280	234	2	18.00–12.00
Hamilton	1XH	1310	229	2	17.00–12.00
Nelson	2XN	1340	224	2	18.00–11.00
Rotorua	1ZC	1350	222	2	18.00–10.30
New Plymouth	2XP	1370	219	2	18.00–11.00
Christchurch	3YD	1400	214	2	21.00–10.00
Dunedin	4XD	1430	210	0.25	
Kaitaia	1XA	1440	208	2	18.00–11.00
Westport	3YW	1460	205	2	18.00–11.20
Tokoroa	1ZO	1420	212	2	18.00–11.20
Taupo	1ZA	1500	200	2	18.00–11.20
Taumarumui	1ZU	1520	197	1	18.00–11.20
Blenheim	2ZE	1540	195	1	18.00–22.00
Hawera	2ZH	1560	192	1	18.00–11.00

St. 2YB on the air only when 2YA is broadc. direct from the House of Representatives.

NEWS: *Stations* 1YA/1YZ/2YA/2YZ/3YA/3YZ/4YA/4YZ:
W 18.00*, 18.30, 19.00*, 19.30, 20.00*, 20.30, 21.00, 22.31 (not Sat), 00.33, 01.15, 03.31 (not Sat), 05.00 (not Sat), 06.00*, 07.00, 09.03, 11.00*, 11.14. Sun 18.00*, 19.00*, 19.30, 20.00*, 20.30, 21.00, 00.33, 01.15, 06.00*, 07.00, 09.03, 11.00*, 11.14. *=BBC.
Stations 1ZB/2ZB/3ZB/4ZB/4ZA: W 18.15, 18.45 (not Sat), 19.15, 19.45, 20.15, 20.45, 21.15 (Sat only), 22.31 (not Sat), 00.15, 01.30, 03.31 (not Sat), 05.15, 06.15, 09.35, 11.30. Sun 19.15, 20.15, 21.15, 00.15, 01.30, 06.15, 09.35 – Station 1ZD: as for 1ZB exc. W 11.30 and Sun 19.15.
News in Maori (1YA etc): Sun 05.50 – **Dominion Weather Forecasts** (1YA etc): D 19.14, 00.30, 04.00, 09.00 – **Rlg** (1YA etc): W 22.00, Sun 23.00, 07.00 – **LL.** (French to Schools): Mon 02.45 (Feb–Aug).

FOREIGN SCE: R. New Zealand.
ADDR: P.O. Box 98, Wellington. **Cable:** Broadserv. **Te:** 48–200 – **L.P.:** Distr. Mgr: J. L. Harstonge. Reg. Engineer: A. S. Chisholm. Prgr. Officer: H.W. Taylor-Smith.
STATIONS (G. C: 174.50E/41.05S): 7.5kW.

Call	kc	m	Call	kc	m	Call	kc	m
ZL7	6080	49.34	ZL2	9540	31.45	ZL19	11830	25.36
ZL18	9520	31.51	ZL3	11780	25.47	ZL21	15110	19.85

Two freq's are used simultaneously, and as the prgr. sched, is intended primarily for Australia and the Pacific Islands, the present aerials are beamed in those two directions. HS=Home Sce. prgr's.
To Pacific Islands: 17.00–19.45 HS on 6080, 9540kc: 20.00–05.45 HS on 11830kc; 06.00–08.45 Special prgr. on 6080, 9540kc (on Sun tr. on 6080kc ends at 08.00).
To Australia: 20.00–22.30 HS on 9540kc; 22.45–05.45 (Sun 20.00–02.00, 03.00–05.45) HS on 15110kc; 09.00–11.45 Special prgr. on 6080, 9540kc.
"Calling Antarctica" (*a prgr. of N, sporting review, "Family Corner"* directed to N.Z. scientific personnel in the Ross Dependency): Sun

08.15–08.45 on 6080kc – **"Calling Samoa"** (in Samoan): Tues 07.00–07.30 – **"Calling the Cook Islands"** (in Rarotongan): Wed 07.45–08.05, Sat 08.00–08.20 (repeat) – **"Calling Niue Island"** (in Niuean): Thurs 07.50 (fortnightly). Freq's as for "Pacific Islands".
New Zealand News: 00.45, 07.00, 10.00 – **Rlg:** W (in N.Z.) 22.00, Sun (in N.Z.) 23.30 – **DX-Prgr.** (Arthur Cushen's DX World) 1st Wed in month: 06.40, 10.30, also Sun following the 1st Wed at 01.00 – **"Lookout":** Sat 09.13, Sun 06.30 – **"Point of View":** Sun 09.13, Mon 07.00 – **"Mailbox":** Fri 07.00, 09.45 – **Maori Music:** Thurs 06.45, Fri 08.15, 09.00, Sun 10.15 – **"This is N.Z.":** Sun 07.45, 10.30, Tues 08.15, 09.30 – **Prgr. Previews:** 23.40, 06.09, 08.40, 08.55, 11.40.
ANN: "This is R. New Zealand" – **INT-SIG:** Call of the N.Z. Bell bird (at 5 second intervals) – **V.** by QSL-card (sea mail). Re. to Distr. Mgr, P.O. Box 2396, Wellington – **PUB:** "The N.Z. Listener" (Home Sce) 39sh (NZ) yearly. Prgr.sched. (free to overseas listeners).
FI: By license payments & adv – **AD:** St's other than YA, YC, YZ and YW broadc. adv. on W – **ALF:** £ 1–10–0.

NORFOLK ISLANDS (Austral. Terr.)

L.T.: GMT+11½ h – **Pr.L:** English.
NORFOLK ISLANDS BROADCASTING SERVICE (Gov.)
Owned by the Norfolk Island Adm. and under the technical direction of the Dept. of Civil Aviation – **ADDR:** Norfolk Island Administration, Kingston – **L.P:** Broadc. Officer: Mrs. T. Lloyd. Official Secr: J. G. Cowap.
STATION: VL2NI 1570kc 0.05kW.
HOME SCE. in English: Mon, Tues, Thurs, Fri 20.30–22.00 (local N & rlg. Sce), Wed 20.30–00.30 (Musical requests to 23.30 & rlg. Sce), Sat 01.30–02.00 & Sun 00.00–00.30 (Music & Aircraft movement)
ANN: "Norfolk Island Broadc. Sce, St. VL2NI" – **V.** by letter. Rp.

PAPUA and NEW GUINEA

(Australian Territory & Trust Territory of New Guinea).
L.T: GMT+10 h – **Pr.L:** English, Melanesian, Pidgin, Vernaculars.
DEPARTMENT OF INFORMATION & EXTENSION SCE'S,
Konedobu (Head Office for all st's). **Cable:** "Adcast" – **L.P:** Dir: L. R. Newby. Dir. Tec: W. F. Carter.

RADIO RABAUL (Gov.)
ADDR: Adm. Broadc. St, P.O. Box 71, Rabaul. **Cable:** Adcast. **Te:** 2700 – **L.P:** St. Mgr: H. H. Leigh S. Dir. Tec: W. Murphy.
STATION: VL9BR 3385kc 88.63m 10kW.
HOME SCE: 20.00–22.00, 06.00–13.00. **N: English:** 08.00, 10.00. **Tolai:** 08.10, 10.10, 10.35. **Pidgin:** 09.05, 10.05, 11.35, 12.05 – **Wrp & Shipping Inf (in Pidgin):** 08.50 – **Ann:** E: "This is R. Rabaul, Station VL9BR". Tolai: "Ava valavala Ongore R. Rabaul VL9BR". Pidgin: "Yupela wok lang harim R. Rabaul VL9BR, Stesin Bilong Yumi". **V.** by letter. Recordings accepted.

RADIO WEWAK (Gov.)
ADDR: P.O. Box 65, Wewak. **Te:** 98. **Cable:** "Adcast" – **L.P:** St.Mgr: R. Wilson. Supervising Technician: J. Whittaker.
STATION (G. C: 143.40E/03.35S): VL9CD 3335kc 89.96m 10kW.
HOME SCE in English & Melanesian Pidgin: 06.15 (Sat/Sun 03.15) – 12.30. **N. in English:** 08.00 (Mon-Fri), 09.00 (Sat/Sun only), 10.00 (Mon-Fri) – **ANN:** "Adm. broadc. St. R. Wewak" – **V.** by letter. Recordings accepted – **F.PL:** Extension of broadc. hrs. to 20.00–22.00 (Mon-Sat), 20.00–23.00 (Sun).

RADIO KEREMA (Gov.)
ADDR: Adm. Broadc. St, Kerema. **Cable:** "Adcast".
STATION: VL8BK 3245kc 92.45m 0.25kW.
HOME SCE. in English, Vernaculars: 07.00–12.00 – **V.** by QSL-card or letter. Re. welcomed.

RADIO DARU (Gov.)
ADDR: Adm. Broadc. St, Daru. **Cable:** Adcast. **Te:** 53 – **L.P:** Officer in charge, Mgr: R. J. Hosking.
STATION: VL8BD 3304kc 90.80m 10kW.
HOME SCE. in Police Motu & English: 07.00–10.30.
N. Mon–Fri 08.00, 08.30, 09.30, 10.10, 10.25. Sat/Sun 09.00.
ANN: E: "R. Daru, st. VL8BD" and "Your Western District Radio st". Police Motu: "Enai be umui emui Western District st" – **V.** by QSL-card – **PUB:** pamphlets (available later on).

RADIO GOROKA (Gov.)
ADDR: Adm. Broadc. St, P.O. Box 146, Goroka. **Cable:** "Adcast". **Te:** 218 – **L.P:** Dir. of Inf. & Extension Sce's: L. R. Newby. St. Mgr: P. B. Bird.
STATION: VL9CG 2410kc 124.5m 0.25kW.
HOME SCE. in Pidgin, Pidgin/English, Gahuku/Kuman: 07.45–12.00. **N:** 08.00 (English), 09.15 (Pidgin/Gahuku), 09.40 (Kuman), 10.00 (English/Pidgin), 11.15 (English/Pidgin).
ANN: E: "R. Goroka, st. VL9CG". Pidgin: "Stesin bilong ol pipal bilong Eastern Highlands District" – **V.** by QSL-card. Re. welcomed.
PUB: pamphlets available on a limited basis.

NZBC

SOLE
BROADCASTING ORGANISATION
IN
NEW ZEALAND

24 Commercial Stations
13 Non-Commercial Stations
4 Television Channels

RADIO NEW ZEALAND

THE OVERSEAS SERVICE OF THE NZBC BROADCASTS IN SHORTWAVE TO AUSTRALIA THE PACIFIC ISLANDS AND ANTARCTICA

OVERSEAS
PROGRAMME SERVICE

SUPPLIES NEW ZEALAND MUSIC AND SPOKEN-WORD PROGRAMMES FOR OVERSEAS BROADCASTING ORGANISATIONS

COMPLETE ADVERTISING
COVERAGE OF THE ENTIRE
COUNTRY

NEW ZEALAND
BROADCASTING
CORPORATION
P. O. BOX 98,
WELLINGTON, N. Z.

Papua/New Guinea – Trust Territory of the Pacific Isl.

RADIO MOUNT HAGEN (Gov.)
ADDR: Mt. Hagen – STATION: VL9CH 2450kc 122.5m 0.25kW.
HOME SCE: 07.00–11.30 in English & Pidgin English.

Projected St's: A total of 20st's are planned for this area – Next planned st: Madang, Milne Bay.

ABC, Port Moresby: see Australia.

SAMOA (American)

L.T: GMT –11 h – Pr.L: Samoan, English.
RADIO STATION WVUV (Gov.)
ADDR: Office of Samoan Information. Pago Pago. Te: 648 – L.P: Gen. Mgr: B. MacKenzie. Dir. Tec: R. Ware.
STATION: WVUV 1120kc 10kW.
HOME SCE: 18.00–24.00, 05.00–08.00. N: English: Mon–Fri 18.30, Tues–Sat 05.45, Sat 22.00, 23.00, 24.00. Samoan: Mon–Fri 19.45–06.30, 07.30 – Samoan Music: 06.30 – ANN: E: "This is st. WVUV, Pago Pago, American Samoa" – V. by letter.

SAMOA (Western)

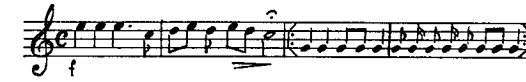
L.T: GMT –11 h – Pr.L: Samoan, English.
SAMOA BROADCASTING SERVICE 2AP (Gov, Comm.)
ADDR: P.O. Box 200, Apia. Te: 2. Cable: Voxpac – L.P: Dir: J. W. Moore. Prgr. Supervisor: L. Levi. Chief Eng: J. K. Brown.
STATIONS: 2AP Apia 1420kc 211.3m 10kW.
HOME SCE: English/Samoan: W 17.00–20.00, 23.00–01.30, 05.00–09.30. Sun: 20.00–23.00, 05.00–09.30. English: 05.00–06.30. Samoan: 06.30–09.30 – N: English: W 18.00, 23.30, 00.00, 06.00 (from BBC, ABC or VOA), 06.15. Samoan: 07.30, 08.30. Rlg (Samoan): Sun 06.30–07.30 – ANN: E: "2AP, Apia, The Samoa Broadc. Service". Samoan: "Ole Si' ufofoga Lenei o Samoa i Sisifo, Ole 2AP i Apia". (The Voice of Western Samoa, 2AP Apia) – V. by QSL-card. Recordings accepted. Rp. – INT-SIG: Gong – F.PL: English Prgr's on 1150kc (0.3kW); Nat Prgr. (exp.) 05.30–08.30(W).
FI: By Gov. appropriation & adv – AD: 17.00–19.00, 05.00–09.30 mainly spots in English, Samoan.

SOLOMON ISLANDS (British)

L.T: GMT+11 h – Pr.L: English, Pidgin-English.
SOLOMON ISLANDS BROADCASTING SERVICE (Gov.)
ADDR: SIBS, Honiara. Cable: Broadcasts. Te: 425 – L.P: Broadc. Officer: R. W. M. McLeish. Asst. Broadc. Officer: W. Bennett. Dir. Tec: P. Butler. Senior Producer: D. E. Rolfsen.
STATIONS (G.C: 160.0E/09.0S): VQO 1030kc 291m 0.66kW VQO4 3995kc 75.09m 5kW – VQO7 7115kc 42.16m 0.5kW.
HOME SCE: 07.30–11.30(Sun 11.20).
N. in English: 07.45(Mon–Fri), 09.15(BBC), 09.30 (Mon–Fri), 11.00(ABC) – Pidgin English (N): 08.15(W) – ANN: "This is the Solomon Islands Broadc. Sce." – INT-SIG: Gong – V. by QSL-card. Re. must contain details to establish authenticity. Recordings accepted – PUB: Prgr-schedule free – FI: By Gov, license payments, adv – AD: Mon–Fri 07.30–11.00, Sat 08.00–11.00 – ALF: $ A2,–.

TAHITI (French)

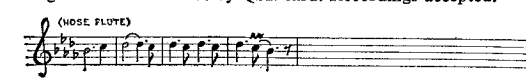
L.T: GMT – 10 h – Pr.L: French, Tahitian.
RADIO TAHITI (Gov.)
ADDR: B.P. 125, Papeete. Cable: R. Tahiti. Te: 1551 – L.P: Dir: M. Espinasse. Dir. Tec: A. Vasseur.
STATIONS (G.C: 149.00W/17.00S): 4 kW
1400kc 214m – 6135kc 48.90m – 11825kc 25.37m
HOME SCE: W 16.15–18.15, 21.00–23.30, 03.00–08.00. Sun 20.00–23.30, 03.00–08.00 (on all freq's). French: 16.15–18.15, 21.45–23.30(W), 05.00–08.00 – Tahitian: 21.00–21.45(W), 03.00–05.00 – N: 21.30(W), 04.00 – Bilingual: Sun 20.00–23.00.
Although times are GMT, calendar days apply to Tahiti only.
ANN: F: "Ici Tahiti, Office de Radiodiff. Télévision Française". Tahitian: "O Radio Tahiti" – INT-SIG: Tahitian flute (vivo) and drums.



AD: D 21.45–22.00, 03.45–04.00.

TONGA (Kingdom of)

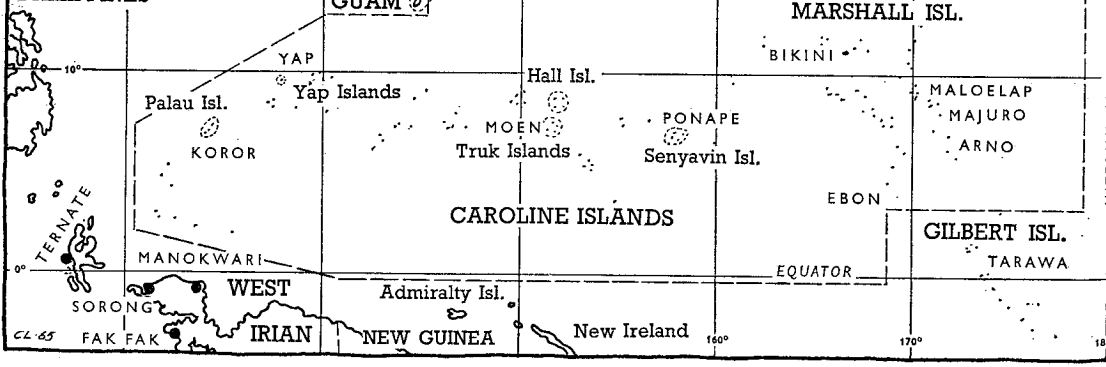
L.T: GMT+13 h – Pr.L: Samoan, Fijian, Tongan, English.
TONGA BROADCASTING COMMISSION (Gov.)
ADDR: P.O. Box 36, Nuku'alofa. Cable: Broadcom. Te: 105 – L.P: Mgr: R. E. Lavin. St. Eng: M. Holmes-Libbis.
STATION (System: AWA): ZCO 1020kc 10kW.
HOME SCE. in Tongan, English: 18.00–20.15, 05.30–10.00 (Tongan, English, Samoan). N: Tongan: 19.00, 06.15. English: 18.00(BBC), 07.00(ABC), 07.15(NZBC) – Wrp (for Tonga, Niue, Samoa, Fiji): At end of N. and 19.15 – Samoan: Wed, Thurs 09.00 – Tongan Music: 18.30, 19.30, 06.00, 06.30 – Overseas Musical Prgr: 07.00–10.00 – Pacific Requests: Mon 07.30–10.00 (Samoan, Fijian, Tongan, English).
ANN: E: "This is the Call of the Friendly Islands "ZCO Nuku'alofa of the Tonga Broadc. Commission". Tongan: "Ko e Ui 'eni'a e 'Otu Felenite, mei he ZCO Nuku'alofa 'a e Komisoni Fakamafola Lea Tonga". Samoan: "O le siu fofoga leni o le otu motu o Tonga, ZCO Nuku'alofa o le Komesinio Faasalalaunga o Tonga" – INT-SIG: Tongan Nose Flute – V. by QSL-card. Recordings accepted.



FI: By Gov. assisted by revenue from adv

TRUST TERRITORY OF THE PACIFIC ISL.

(Mariana Islands (exc. Guam), Caroline Islands, Marshall Islands).
L.T: GMT+10 h – Pr.L: English, Ponapean, Chamorro, Palauan, Trukese, Marshallese, Yapese.
ADDR: Head Office: High Commissioner, Trust Territory of the Pacific Islands, Saipan, Mariana Islands 96950 – L.P: Dir. Gen:



NORTH AMERICA
GREENLAND
1:40 Mill.
KM
0
500
1000
2000
Arctic Ocean
Baffin Bay
Davis Strait
Denmark Strait
Hudson Bay
GULF OF MEXICO
CARIBBEAN SEA
PACIFIC OCEAN
ATLANTIC OCEAN
NORTH
CANADA
UNITED STATES
MEXICO
GREENLAND
ALASKA
THULE
UPERNAVIK
ANGMAGSSALIK
GODHAVN
KOOK
GODTHAB
FREDERIKSHAB
KOVIK
INUVIK
FAIRBANKS
ANCHORAGE
DAWSON
CORDOVA
Yukon
WHITEHORSE
North West Territories
YELLOW-KNIFE
HAY RIVER
FORT SMITH
NELSON
CHURCHILL
Baffin Isl.
Labrador
SCHEFFERVILLE
GOOSE BAY
British Columbia
Alberta
Saskatchewan
Manitoba
Ontario
Quebec
EDMONTON
PRINCE ALBERT
KAMLOOPS
VANCOUVER
CALGARY
SASKATOON
WATROUS
REGINA
KELOWNA
MEDICINE HAT
LETHBRIDGE
BRANDON
WINNIPEG
VICTORIA
SEATTLE
SPOKANE
Washington
PORTLAND
Montana
N. Dakota
Minnesota
ST. PAUL
MINNEAPOLIS
Oregon
Idaho
S. Dakota
Wyoming
Nebraska
Iowa
Wisconsin
Michigan
CHICAGO
DESMOINES
OMAHA
WATERLOO
SACRAMENTO
DIXON
SAN FRANCISCO
Nevada
SALT LAKE CITY
Utah
DENVER
K. CITY
Colorado
Kansas
Missouri
Oklahoma
Arkansas
LAWRENCE
ST. LOUIS
TULSA
OKLAHOMA CITY
LITTLE ROCK
Kentucky
Tennessee
MEMPHIS
Indiana
Illinois
Ohio
INDIANAPOLIS
CINCINNATI
LOUISVILLE
NASHVILLE
ATLANTA
CHARLOTTE
S. Carolina
N. Carolina
Virginia
Maryland
WASHINGTON
RICHMOND
RALEIGH
PEMBROKE
Bermuda
FRESNO
DELANO
HOLLYWOOD
LOS ANGELES
California
Arizona
ALBUQUERQUE
New Mexico
TIJUANA
MEXICALI
ENSENADA
CIUDAD JUAREZ
FORT WORTH
DALLAS
SHREVEP
Texas
Louisianna
Mississippi
Alabama
Georgia
BIRMINGHAM
HERMOSILLO
CHIHUAHUA
CUIDAD OBREGON
PIEDRAS NEGRAS
CIUDAD ACUNA
NUEVO LAREDO
SABINAS
TORREON
REYNOSA
CULIACAN
LA PAZ
MONTERREY
SALTILLO
ROSARIO
ZACATECAS
SAN ANTONIO
HOUSTON
CORPUS CHRISTI
RIO BRAVO
NEW ORLEANS
Florida
MIAMI
NASSAU
Bahama Islands
CUBA
HABANA
PETIONVILLE
HAITI
KINGSTON
JAMAICA
PUERTO RICO
SANTO DOMINGO
DOMINICAN REP.
GUADALAJARA
LEON
IRAPUATO
MEXICO CITY
TAMPICO
S. LUISPOTOSI
MERIDA
MORELIA
ZAMORA
URUAPAN
JALAPA
VERA CRUZ
PUEBLA
ORIZABA
VILLA HERMOSA
TUXTLA
GTRIEZ
OAXACA
ACAPULCO
ZITACUARO
BELIZE
BR. HONDURAS
CENTRAL AMERICA
GUATEMALA CITY
SAN SALVADOR
TEGUCIGALPA
MANAGUA
SAN JOSE
PANAMA
MARACAIBO
MERIDA
VENEZUELA
COLOMBIA
MEDELLIN
Labrador
Quebec
Maine
Massachusetts
Connecticut
Delaware
Pennsylvania
Michigan
New York
Ohio
Virginia
Maryland
Florida
Louisianna
Alabama
Georgia
Kentucky
Tennessee
Arkansas
Missouri
Kansas
Colorado
Nebraska
Iowa
Wisconsin
Minnesota
Montana
Wyoming
Idaho
Oregon
Nevada
Utah
Arizona
New Mexico
Texas
Oklahoma
CHICOUTIMI
TIMMINS
FORT ARTHUR
FORT WILLIAM
SUDBURY
QUEBEC
TROIS RIVIERES
VERCHERES
MONTREAL
OTTAWA
TORONTO
BUFFALO
PITTSB.
PHILADELPHIA
BOSTON
NEW YORK
BOUND BROOK
NEWFOUNDLAND
GANDER
ST JOHN'S
ST. PIERRE
SYDNEY
HALIFAX
ST JOHN
CHARLOTTETOWN
GRAND FALLS
DRUMMONDVILLE
WOBURN
STOCK
TON
ACKVILLE
LONDON
DETROIT
WINDSOR
CLEVELAND
CHICAGO
DESMOINES
OMAHA
MINNEAPOLIS
ST. PAUL
WATERLOO
K. CITY
LAWRENCE
ST. LOUIS
TULSA
OKLAHOMA CITY
LITTLE ROCK
MEMPHIS
NASHVILLE
ATLANTA
CHARLOTTE
BIRMINGHAM
DALLAS
SHREVEP
FORT WORTH
HOUSTON
NEW ORLEANS
SAN ANTONIO
CORPUS CHRISTI
RIO BRAVO
MIAMI
NASSAU
Bahama Islands
HABANA
CUBA
PETIONVILLE
HAITI
KINGSTON
JAMAICA
PUERTO RICO
SANTO DOMINGO
DOMINICAN REP.
MERIDA
VENEZUELA
COLOMBIA
MEDELLIN
MARACAIBO
PANAMA
SAN JOSE
MANAGUA
TEGUCIGALPA
GUATEMALA CITY
SAN SALVADOR
BELIZE
BR. HONDURAS
CENTRAL AMERICA
VILLA HERMOSA
TUXTLA
GTRIEZ
OAXACA
ACAPULCO
ZITACUARO
MORELIA
ZAMORA
URUAPAN
JALAPA
VERA CRUZ
PUEBLA
ORIZABA
MEXICO CITY
IRAPUATO
S. LUISPOTOSI
MERIDA
GUADALAJARA
LEON
TAMPICO
ROSARIO
ZACATECAS
SALTILLO
MONTERREY
CULIACAN
LA PAZ
TORREON
REYNOSA
SABINAS
NUEVO LAREDO
CIUDAD ACUNA
PIEDRAS NEGRAS
CUIDAD OBREGON
CHIHUAHUA
HERMOSILLO
CIUDAD JUAREZ
TIJUANA
MEXICALI
ENSENADA
ALBUQUERQUE
Arizona
New Mexico
DELANO
HOLLYWOOD
LOS ANGELES
FRESNO
SAN FRANCISCO
SACRAMENTO
DIXON
SALT LAKE CITY
Utah
DENVER
Nevada
Colorado
California
Oregon
Idaho
Wyoming
Montana
Washington
SPOKANE
PORTLAND
SEATTLE
VICTORIA
KAMLOOPS
VANCOUVER
CALGARY
KELOWNA
MEDICINE HAT
LETHBRIDGE
BRANDON
WINNIPEG
EDMONTON
PRINCE ALBERT
SASKATOON
WATROUS
REGINA
British Columbia
Alberta
Saskatchewan
Manitoba
Ontario
Quebec
Labrador
SCHEFFERVILLE
GOOSE BAY
NELSON
FORT SMITH
HAY RIVER
YELLOW-KNIFE
North West Territories
WHITEHORSE
CORDOVA
Yukon
ANCHORAGE
DAWSON
FAIRBANKS
INUVIK
ALASKA
Baffin Isl.
KOVIK
FREDERIKSHAB
GODTHAB
KOOK
GODHAVN
ANGMAGSSALIK
UPERNAVIK
GREENLAND
THULE
Arctic Ocean
Baffin Bay
Davis Strait
Denmark Strait
Hudson Bay
GULF OF MEXICO
CARIBBEAN SEA
PACIFIC OCEAN
ATLANTIC OCEAN
NORTH
CANADA
UNITED STATES
MEXICO
120°
110°
100°
90°
80°
70°
60°
50°
40°
30°
20°
10°
HAG583

Trust Territory of the Pacific Isl. – Canada

Asst. Commissioner for Public Affairs: J. E. de Young. Broadc. Officer: J. Laforest. **Studios:** Dist. Adm. Ponape, Eastern Caroline Isl. 96941 (WSZD). St. Mgr: C. Thomas, Dist. Adm. Truk, Eastern Caroline Isl. 96942 (WSZC). St. Mgr: K. Peter; Dist. Adm. Saipan, Mariana Isl. 96950 (KJQR). St. Mgr: F. Rabauliman; Dist. Adm. Palau District, Koror, Western Caroline Isl. 96940 (WSZB). St. Mgr: H. Rodas; Dist. Adm. Marshall Isl. District, Majuro, Marshall Isl. 96960 (WSZO), St. Mgr: L. Edwards; Dist. Adm. Yap District, Eastern Caroline Isl. 96943 (WSZA). St. Mgr: A. Yug.

STATIONS (System: Gates):

Location	Call	kc	kW	H of tr. (approx.)
Ponape	WSZD	1450	1	20.30–12.00
Truk	WSZC	1500	1	21.00–03.00, 06.00–12.00
Saipan	KJQR	1350	1	20.30–12.00
Koror	WSZB	1500	0.25	21.00–15.00
Majuro	WSZO	1440	1	20.30–12.00
Yap	WSZA	1480	1	20.30–12.00

Prgr's: Educational & entertainment.
English (Educ): 23.00–23.15, 23.30–23.45, 00.30–00.45, 01.00–01.45.
Wrp: 01.45 – **Local N:** 22.25, 10.00.

ANN: Ponape: "This is R. St. WSZD, Ponape – Met. St. WSZD Nan Ponape". Truk: "This is R. St. WSZC in Moen Truk – Ach nenien appio WSZC non nomun Truk". Saipan: "This is R. St. KJOR Saipan". Koror: "This is R. St. WSZB, Koror, Palau". Majuro: "This is R. St. WSZO Majuro". Yap: "This is R. St. Yap" – **V.** by letter (WSZC).

NORTH AMERICA

BERMUDA (British)

L.T: GMT – 4 h – **Pr.L:** English.

BERMUDA BROADCASTING CO. LTD. (Comm.)
ADDR: Box 452, Hamilton. **Te:** 2-1122. **Cable:** ZBM Bermuda. **L.P:** Man. Dir: W. Staskow, Mgr: Q. Edness. Dir. Tec: J. H. Spershott
STATIONS (1kW): ZBM1 1235kc – ZBM2 1340kc – FM: 89.1 Mc.
HOME SCE. in English: On 1235kc: 24 h – On 1340kc: 24 h. **N, Wrp:** 10.55, 11.45, 13.00, 15.00, 16.45, 18.00, 19.00, 20.00, 21.00, 22.00, 23.00, 01.00, 02.05, 03.30, 04.00, 04.30, 05.00.
T.S: every ¼ h – **Portuguese:** 09.45–10.15 on 1235kc.
ANN: "This is ZBM Radio Bermuda" – **V.** by QSL-card. **Rep.** Recordings accepted.

CAPITAL BROADCASTING CO. LTD.
ADDR: Box 652, Hamilton. **Te:** 2-4444. **Cable:** Capbro – **L.P:** Man. Dir: M. E. Sheppard. Dir. Tec: B. J. Roche.
STATION (System: Bauer): 960kc 1kW.
HOME SCE. in English: 24 h – **N:** 10.55*, 11.30, 12.25, 13.30*, 14.30, 16.15*, 16.30, 17.25*, 20.55*, 22.15*, 22.45, 02.55, 06.00, 08.00. *=Headlines – **ANN:** "This is your favourite R. Station ZFB1 960 on your dial" – **V.** by letter – **PUB:** Prgr. schedule on request.

CANADA

L.T: See Time Table – **Pr.L:** English, French.
Abbreviations: Nf=Newfoundland, NS=Nova Scotia, PEI=Prince Edward Isl. NB=N. Brunswick, P=Pacific, Qu=Quebec, O=Ontario, M=Manitoba, Sa=Saskatchewan, Al=Alberta, BC=British Columbia, W=Winnipeg, Pr=Province, Prince R=Prince Rupert, NWT=No.W.Territories.

CANADIAN BROADCASTING CORPORATION INTERNATIONAL SERVICE (Publicly-owned)
ADDR: Canadian Broadcasting Corporation, International Service, P.O. Box 6000, Montreal. **Cable:** Intrad.
L.P: Dir: C. R. Delafield. Supervisor of Sections: A. L. Pidgeon. Supervisor of Eng. Sce: S. B. Duke Supervisor of Inf Sce's: G. Teffaine. Public Rel. Officer: K. D. Renner. Coordinator of Transcription Services: G. Poupart. Head Eng. Sce: P. A. Tallman; Head French Sce: L. Coté. Head Latin American Sce: P. Marcos Bilbao. Supervisor of TV Prod: G. Delanoe.

STATIONS: All international sw. broadcasts from Canada are directed by CBC International Service, which is owned by the people of Canada. All prgr's are sent by landline from Montreal to Sackville, New Brunswick, on Canada's Atlantic coast, whence they are transmitted by three 50kW tr's. (G.C: 64.19W/45.53N).

kc	m	kc	m	kc	m	kc	m
5955	50.38	9625	31.17	11810	25.40	15365	19.52
5970	50.25	9630	31.15	15190	19.75	17820	16.84
5990	50.08	11720	25.60	15320	19.58	21595	13.89

INTERNATIONAL SERVICE
EUROPEAN SCE: 05.55–06.30, 07.25–08.20, 10.55–18.30, 20.00–21.52.
05.55–06.30 on 5955kc; 07.25–08.20 on 5990/9630kc; 10.55–12.15 on 11720/15365kc (Nov–Feb), 15320/17820kc (March–Apr); 12.15–13.13 on 15365kc; 13.15–15.15 on 11720/15365/17820kc (Nov–Feb), 15320/17820/21595kc (March–Apr); 15.16–15.29 on 15365/17820kc; 15.30–16.30 on 11720/15365/17820kc (Nov–Feb), 15320/17820/21595kc (March–Apr); 16.31–16.59 on 15365/17820kc; 17.00–18.30 on 11720/15365/17820kc (Nov–Feb), 15320/17820/21595kc (March–Apr); 20.00–21.52 on 9630/11720/15320kc.

Time	Programmes	News
05.55–06.30	Forces Relay	**English** 06.00, French 06.15
07.25–08.00	**English**	
08.00–08.20	French	
10.55–12.14	Forces Relay	**English** 11.00, 12.00, French 11.30
12.15–13.13	**English**	12.15
13.16–13.44	French	13.16
13.45–14.15	Ukrainian	
14.15–14.45	Russian	
14.45–15.15	Czech & Slovak	
15.16–15.29	**News**	**English** 15.16, French 15.22
15.30–16.00	Polish	
16.00–16.15	Russian	
16.15–16.30	Czech & Slovak	
16.31–16.59	Forces Relay	**English** 16.32, French 16.50
17.00–17.15	Polish	
17.15–17.45	Czech & Slovak	
17.45–18.15	German	
18.15–18.30	Hungarian	
20.00–20.45	French	20.01
20.45–21.15	Forces Relay	French 20.45, **English** 21.00
21.15–21.52	**English**	21.37

NO. AMERICAN & ANTILLES SERVICE
12.15–13.13 on 5970/11720kc (Nov–Feb), 9625/11720kc (March–Apr); 13.16–13.44 on 11720kc.
12.15–13.13 **English**, 13.16–13.44 French. **N. in English** 12.15, N. in French 13.16.

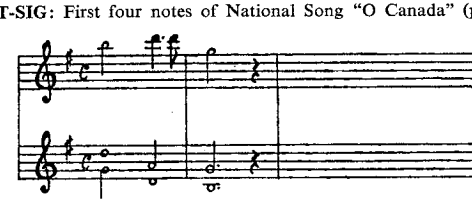
AFRICAN SERVICE: 07.25–08.20, 18.32–19.58.
07.25–08.20 on 5990/9630kc; 18.32–19.45 on 11720/15320/17820kc (Nov–Feb), 15320/17820/21595kc (March–Apr); 19.45–19.58 on 11720/15320kc (Nov–Feb), 15320/17820kc (March–Apr). The period 07.25–08.20 is rebroadcast by BBC at 07.30–08.15. **N. in English** 18.33. N. in French 19.15.

NORTHERN CANADA SERVICE (East, Central, West)
In English & French: 00.58–07.06, 10.55–12.14, 15.16–15.29, 16.31–16.59, 21.58–22.46.
00.58–02.30 on 5970/9625/11720kc (Nov–Feb), 9625/11720/15190kc (March–Apr); 02.30–07.06 on 9625/11720kc; 10.55–12.14 on 5970kc (Nov–Feb), 9625kc (March–Apr); 15.16–15.29 on 11720kc (Nov–Feb), 9625kc (March–Apr); 16.31–16.59 on 11720kc; 21.58–22.46 on 5970/9625/11720kc (Nov–Feb), 9625/11720/15190kc (March–Apr).
N. in English: 22.00, 01.00, 02.00(W), 03.30(Sun), 04.00, 05.00, 06.00, 07.00. **N. in French:** 03.00(W), 06.15(Sun), 06.20(W).

CARRIBEAN & LATIN AMERICAN SERVICE
22.58–00.46 on 5990/9625/11810kc (Nov–Feb), 9625/11810/15190kc (March–Apr).
English: 22.58–23.30 (N. 23.01). Portuguese 23.30–00.00 (N. 23.30) Spanish 00.00–00.46 (N. 00.00).

AUSTRALASIAN SERVICE
08.25–09.35 on 5970/9630kc **(English). N.** 08.30.

DX PRGR (times indicated are approx): In **English:** Sat 12.35, 18.35, 21.30, 23.20, Sun 07.50. In **French:** Sat 19.50, 20.35. In **German:** Sun 18.00, 18.45. In **Portuguese:** Sat 23.43. In **Spanish:** Thurs 00.30. (fortnightly) 14.45, 17.15.
ANN: E: "This is the International Sce. of the CBC". F: "Ici R. Canada". G: "Hier spricht Kanada". P: "A R. Canada transmite para o Brasil". Sp: "Transmite R. Canada". Czech: "Kanada volá Cesko-slovensko". Polish: "Tu mówi Kanada". Slovak: "Hovorí Kanada".
INT-SIG: First four notes of National Song "O Canada" (piano):



V. by letter or QSL-card – **PUB:** CBC-Radio-Canada prgr.sched. published four times, a year and sent free upon request. **F.PL:** Seven 250kW sw-tr's.

CBC NATIONAL SERVICE (Publicly-owned.)
ADDR: Head Office: P.O. Box 478, Terminal "A", Ottawa – **International Sce:** P.O. Box 6000, Montreal. **French Networks Div:** P.O. Box 6000, Montreal. **English Networks Div:** P.O. Box 500, Toronto. **Newfoundland Reg:** P.O. Box 5490, St. John's. **Maritime Reg:** P.O. Box 3000, Halifax. **Prairie Reg:** P.O. Box 160, Winnipeg. **British Columbia Reg:** 701 Hornby Str. Vancouver. **Ottawa Area:** P.O. Box 3220, Station "C", Ottawa. **Northern and Armed Forces Sces:** P.O. Box 478, Terminal "A", Ottawa. **Engineering Headquarters:** 7925 Cote Street, Luc Road, Montreal – **Offices outside Canada:** CBC Representatives: **New York:** Suite 2401, 1270 Avenue of the Americas, New York 20, N. Y. **London:** The Langham, Portland Place, London W.1, England. **Paris:** 17 Ave. Matignon, Paris 8, France.
L.P: Pres: J. A. Ouimet. Vice-Pres: Capt. E. S. Briggs. Vice-Pres. (Asst. to the Pres): R. C. Fraser. Vice-Pres. Prgr: E. S. Hallman. Vice-Pres. Engineering: J. E. Hayes. Vice-Pres. Finance: V. F. Davies. Vice-Pres. Planning: J. P. Gilmore. Vice-Pres: G. Coderre. Vice-Pres & Gen. Mgr. Network Broadc: (English): H. G. Walker. Vice-Pres. & Gen. Mgr. Network Broadc. (French): M. Ouimet. Vice-Pres. & Gen. Mgr. Reg. Broadc: Charles Jennings.
CBC Representatives: Paris: J. Saint Georges. London: F. Murtrie. New York, United Nations: Miss D. McCallum

ENGLISH NETWORK

Call	kc	kW	Call	kc	kW	Call	kc	kW
1) CBT	540	10	10) CHAK	860	1	18) CBI	1140	10
2) CBK	540	50	11) CBO	910	5	19) CFFB	1200	0.04
3) CFWH	570	1	12) CBM	940	50	20) CHFC	1230	0.25
4) CBN	°640	10	13) CBY	990	10	21) CFGB	1340	1
5) CBU	°690	10	14) CBW	990	50	22) CFYK	1340	1
6) CBL	740	50	15) CBR	1010	50	23) CBG	1450	0.25
7) CBX	740	50	16) CBA	1070	50	24) CBZ	970	10
8) CBH	860	10	17) CBD	1110	10	25) CBE	1550	10
9) CFPR	860	10						

1) P.O. Box 218, Grand Falls, Nfld – 2) P.O. Box 347, Regina, Sask – 3) P.O. Box 730, Whitehorse Y.T. – 4) P.O. Box 5490, St. John's, Nfld – 5) 701 Hornby Str. Vancouver, B.C – 6) P.O. Box 500, Toronto O – 7) P.O. Box 555, Edmonton, Alta – 8) P.O. Box 3000, Halifax – 9) 343 W. 2nd Ave, Prince Rupert B.C. – 10) P.O. Box 1220, Inuvik, N.W.T – 11) P.O. Box 3220, Station "C". Ottawa, O – 12) P.O. Box 6000, Montreal, Que – 13) P.O. Box 610, Corner Brook, Nfld – 14) P.O. Box 160, Winnipeg, Man – 15) 1724 Westmount Blvd, Calgary Alta – 16) P.O. Box 1200, Sackville, N.B. – 17) St. John, N.B. – 18) P.O. Box 700 Sydney, N.S – 19) P.O.Box 10, Frobisher Bay, N.W.T – 20) Fort Churchill, Man – 21) P.O. Box 237, Goose Bay, Lab – 22) P.O. Box 160, Yellowknife, N.W.T – 23) P.O. Box 790, Gander, Nfld – 24) P.O. Box 1538, Fredericton, N.B – 25) Security Bldg University & Pelissier, Windsor, O.+126 low power relay st's not mentioned.

Short Waves:
4) CKZN 6160kc 48.70m 0.3kW 11.00–04.00 (Relay CBN).
5) CKZU 6160kc 48.70m 0.5kW 14.00(Sun 15.00)–09.05 (Relay CBU)
Note: Although times are in GMT, calender days apply to Canada only.
4) **N:** 11.00, 11.30, 13.00*, 14.25(not Sat), 15.30 (BBC), 17.00, 19.00 (not Sat), 20.30(Sat only), 21.30, 22.30*, 23.15, 02.00*, 03.30. Sun: 11.00, 12.00, 15.45, 17.00 (BBC), 18.00*, 20.00*, 22.00, 02.00*, 04.00. *=CBC Nat. news – **Wrp:** after N. at 11.00, 15.45(Sun), 17.00(Sat), 22.30
5) **N:** Mon–Fri 14.00, 15.00, 15.30, 16.00, 16.15, 16.27, 17.00(BBC), 20.15, 22.20, 00.00, 01.30, 06.00, 09.00. Sat 14.00, 15.00, 15.30, 16.00, 16.27, 17.00(BBC), 18.00, 09.00. Sun 17.00(BBC), 03.00, 08.00, 09.00 – **Wrp:** after N. at 20.15(Mon–Fri).
FM: CBU-FM Vancouver 107.5Mc 100kW.

FRENCH NETWORK

Call	kc	kW	Call	kc	kW	Call	kc	kW
1) CBAF	1300	5	3) CBF	690	50	5) CBOF	1250	10
2) CBV	980	5	4) CBJ	1580	10	6) CJBC	860	50

1) P.O. Box 950, Moncton, N.B. – 2) Palais Montcalm, Que – 3) P.O. Box 6000, Montreal, Que – 4) 121 rue Racine Est, Chicoutimi, Que – 5) P.O. Box 3220, Ottawa O – 6) P.O. Box 500, Toronto, O.
+ 24 low-power stations not mentioned.

PRIVATELY OWNED COMMERCIAL BROADCASTING STATIONS

CANADIAN ASSOCIATION OF RADIO AND TELEVISION BROADCASTERS: Head Office, 108 Sparks St, Ottawa 4.
Medium Waves: Stations less 5kW not mentioned. °=Short Wave.

Call	kc	kW	Call	kc	kW
1) CFNB	550	50	7) CFRA	580	50/10
2) CHLN	550	10/5	8) CHLC	580	5/2.5
3) CKPG	550	10	9) CJFX	580	10
4) CJKL	560	5	10) CKPR	580	5/1
5) CKCN	560	10/5	11) CKUA	580	10
6) CJEM	570	5/1	12) CKY	580	50

Radio-Canada

expo67

1867 Centennial of Canadian Confederation 1967 — La Centenaire de la Confédération Canadienne

1867-1967

Reports on GREAT CANADIAN EVENTS OF 1967

daily in eleven languages

to Africa, Europe, Australasia, North America and the Caribbean area.

Offers a wide variety of programs: news reports, actualities, commentaries, discotheque music, Stamp Corner, Science reports, Radio-Canada Shortwave Club, Listener's Corner and many more.

Answers all mail from listeners and acknowledges correct information with a QSL card.

Provides broadcasting organizations with Canadian music and spoken-word transcriptions.

(Program schedule sent free on request)

INTERNATIONAL SERVICE

CBC

CANADIAN BROADCASTING CORPORATION

P.O. BOX 6000 • MONTREAL • CANADA

	Call	kc	kW
13)	VOCM	590	10
14)	CKEY	590	10/5
15)	CFAR	590	10/1
16)	CFCF	°600	5
17)	CFCH	600	10/5
18)	CFQC	600	5
19)	CJOR	600	10
20)	CHNC	610	10/5
21)	CKTB	610	10/5
22)	CKYL	610	10/1
23)	CFCL	620	10/5
24)	CKCK	620	5
25)	CKCM	620	10
26)	CFCY	630	10
27)	CFCO	630	10/1
28)	CHED	630	10
29)	CHLT	630	10/5
30)	CJET	630	10
31)	CKRC	630	10
32)	CHFA	680	5
33)	CJCN	680	10
34)	CJOB	680	10/2.5
35)	CKGB	680	10
36)	CHFI	680	1/10
37)	CFRG	710	5
38)	CKVM	710	10/1
39)	CKAC	730	50
40)	CKDM	730	10
41)	CKLG	730	10
42)	CFDR	790	5
43)	CFCW	790	10
44)	CKSO	790	10/5
45)	CHAB	800	10
46)	CHRC	800	10
47)	CJAD	800	50/10
48)	CJLX	800	10/5
49)	CKOK	800	10/0.5
50)	CKLW	800	50
51)	CHQR	810	10
52)	CKRD	850	10/1
53)	CKVL	850	50/10
54)	CHML	900	5
55)	CHNO	900	10/1
56)	CJBR	900	10
57)	CJVI	900	10
58)	CKBI	900	10
59)	CKVD	900	10/2.5
60)	CFJC	910	10/1
61)	CJDV	910	5
62)	CJCH	920	10/5
63)	CKCY	920	10/5
64)	CFBC	930	10/5
65)	CJCA	930	10/5
66)	CJON	930	10
67)	CJGX	940	10
68)	CJIB	940	10/1
69)	CKBB	950	10/2.5
70)	CKNB	950	10/1
71)	CHER	950	10
72)	CFAC	960	10
73)	CHNS	*960	10
74)	CKWS	960	5
75)	CKCH	970	5
76)	CFPL	980	10/5
77)	CHEX	980	5
78)	CKGM	980	10
79)	CKNW	980	50
80)	CKRM	980	10/5
81)	CKBW	1000	10
82)	CFRB	°1010	50
83)	CFGP	1050	10
84)	CHUM	1050	50
85)	CJIC	1050	10/2.5
86)	CKSB	1050	10
87)	CJNB	1050	10
88)	CFCN	°1060	50/25
89)	CJLR	1060	10
90)	CHOK	1070	5/1
91)	CKSA	1080	10
92)	CHEC	1090	5
93)	CHRS	1090	10
94)	CHQT	1110	10
95)	CKWX	°1130	50
96)	CKXL	1140	10
97)	CHSJ	1150	10/5
98)	CKOC	1150	5
99)	CKTR	1150	10/1
100)	CKX	1150	10/1
101)	CJOC	1220	10/5
102)	CKDA	1220	10
103)	CKCW	1220	10
104)	CKBL	1250	10/5
105)	CKOM	1250	10
106)	CHSM	1250	10
107)	CFRN	1260	50
108)	CHAT	1270	10
109)	CHWK	1270	10
110)	CJCB	°1270	10
111)	CHIQ	1280	10/5
112)	CJMS	1280	50
113)	CKCV	1280	10/5
114)	CFGM	1310	10/2.5
115)	CHGB	1310	5
116)	CKOY	1310	50
117)	CHQM	1320	10
118)	CJSO	1320	10/5
119)	CKEC	1320	5
120)	CKLB	1350	10/5
121)	CKBC	1360	10
122)	CKLC	1380	10/5
123)	CKPC	1380	10
124)	CJFP	1400	10/0.25
125)	CFMB	1410	10
126)	CFUN	1410	10
127)	CKSL	1410	10
128)	CKFH	1430	10/5
128)	CKFH	1430	10/5
129)	CKPM	1440	10
130)	CJOY	1460	10/5
131)	CKRB	1460	10/5
132)	CFOX	1470	10/5
133)	CJQM	1470	5
134)	CHYM	1490	10/5
135)	CHIN	1540	50
136)	CFOR	1570	10/1
137)	CHUB	1570	10
138)	CKLM	1570	10
139)	CJRN	1600	10

Short Waves:	kc	kW	
16) CFCW	6005	0.075	Canadian Marconi Co, Montreal: 24 h
110) CJCX	6010	1	Cape Breton Broadc. Sydney: 09.00–05.00
88) CFVP	6030	1	The Voice of Prairies, Calgary: 24 h
82) CFRX	6070	1	R. CFBR, Toronto: 24 h
95) CFKX	6080	0.01	R. CKWX, Vancouver
73) CHNX	6130	0.5	Maritime Broadc. Co, Halifax: 24 h

Medium Waves:

1) **R. Atlantic Ltd,** 67 York St, Fredericton, NB. **L.P:** Dir. Gen: D. M. Neill. St. Mgr: J. T. H. Fenety. Dir. Tec: G. D. Love. **D.Prgr:** 24 h. **N.** On the h and half h; also 16.30(W), 22.15(W). **V.** by letter. **Re.** in E.

2) **R. Trois Rivières, Inc** 3550 Royal Blvd, Trois-Rivières, Qu. **L.P:** St. Mgr: M. Danserou. Dir. Tec: O. Lefebre. **D.Prgr. in French:** 11.00–08.00(Sat 09.00). **N:** 5 min before the h. **V.** by QSL-card.

3) **R. St. CKPG Ltd,** 1220 6th Ave, Prince George, B.C.

4) **Kirkland Lake Broadc. Ltd,** Woolworth Bldg, Governm. Rd. West, Kirkland Lake, O.

5) **R. Sept-Iles Inc,** Sept-Iles, Qu. **D.Prgr:** W 10.30–07.00. **N:** On the h and half h. **V.** by letter.

6) **Edmundston R. Ltd,** 99 Canada Rd, Edmundston, NB.

7) **CFRA Broadc. Ltd,** 150 Isabella Str, Ottawa, O. **L.P:** Gen. Mgr: T. Kielty. Chief Eng: G. Roach. **D.Prgr:** 24 h. **N:** Every h and half h. **V.** by QSL-card.

8) **R. Cote-Nord Inc,** Blvd. Blanche 15, Hauterive, Qu. **L.P:** St. Mgr: H. Desjardins. Dir. Tec: G. de Varennes. **D.Prgr:** 10.30–04.30 in French. **N:** On the h. **V.** by letter.

9) **Atlantic Broadc. Ltd,** St. Ninian St, Antigonish, NS. **L.P:** St. Mgr: J. C. Nunn. **D.Prgr:** 09.00–03.15. **N:** 09.00, 11.00, 12.00, 13.00, 14.00, 15.15, 16.00, 18.00, 19.00, 20.00, 22.00, 01.00, 03.15. **V.** by letter.

10) **H. F. Dougall Co. Ltd,** 87 No. Hill St, Port Arthur, O. **L.P:** St. Mgr: J. W. Hagerman. Dir. Tec: W. Pinko. **D.Prgr:** 12.52–08.02. **N. in English:** 14.50, 19.00, 21.50, 00.20, 01.30, 05.00. **Foreign Languages** (Sun): 19.30 English/Welsh/Irish/Scottish, 22.50 German/Dutch, 23.10 Polish/Danish, 23.30 Ukrainian/Norwegian, 23.50 Italian/Swedish, 00.10 Hungarian. **V.** by letter.

11) **University of Alberta,** 10526 Jasper Ave, Edmonton, Al.

12) **Moffat Broadc. Ltd,** 432 Main St, Winnipeg, Man. **L.P:** Dir. Gen: R. L. Moffat. Dir. Tec: A. Malowanchuk. **D.Prgr:** 24 h. **N:** Every 25th & 55th min of the h. **V.** by letter.

13) **Colonial Broadc. System Ltd,** McBride's Hill, St. John's. Nf. **D.Prgr:** 08.58–03.30. **V.** by letter.

14) **Shoreacres Broadc. Co. Ltd,** 247 Davonport Rd, Toronto 5, O. **D.Prgr:** 24 h. **V.** by letter.

15) **Arctic R. Corpo Ltd,** 75 Callinan Str, Flin Flon Man.

16) **Canadian Marconi Co,** 405 Ogilvy Ave, Montreal 15. Qu. **L.P:** Dir. Gen: S. B. Hayward. Dir. Tec: J. C. Douglas. **N:** Every h on the h. **V.** by QSL-card.

17) **Northern Broadc. Ltd,** Callander, O.

18) **A. A. Murphy & Sons Ltd,** 216 First Ave, No, Saskatoon. Sa. **L.P:** Gen. Mgr: V. Dallin. Chief Eng: J. Vander Tuuk. **V.** by QSL-card.

19) **CJOR Ltd,** 846 Howe St, Vancouver, BC. **L.P:** Dir. Gen: Mrs. G. C. Chandler. St. Mgr: J. Donaldson. Dir. Tec: S. Davis. **D.Prgr:** 14.00–10.00. **N:** 14.00, 14.30, 15.00, 15.30, 16.00, 16.30, 17.00, 18.00, 19.00, 20.00, 21.00, 22.00, 23.00, 24.00, 00.30, 01.00, 01.30, 02.00, 03.00, 04.00, 05.00, 06.00, 08.00, 09.00.

20) **La Cie Gaspésienne de Radiodiff. Ltée,** Rue Principale et Boul. Perron, New Carlisle, Qu.

21) **Niagara District Broadc. Co. Ltd,** P.O. Box 610, St. Catharines, O – **L.P:** St. Mgr: Miss M. C. Burgoyne. Dir. Tec: W. H. Allen. **D.Prgr:**

IRTS

FOUNDED 1939: DEDICATED TO SERVING BROADCASTING

MEMBERSHIP: Membership is personal; currently consisting of 1500 policy and decision makers in all phases of broadcasting, advertising and allied fields.

A FORUM: Semi-monthly Newsmaker Luncheon meetings present an excellent platform for World and Industry Leaders who give their views on current developments in communications and other timely topics.

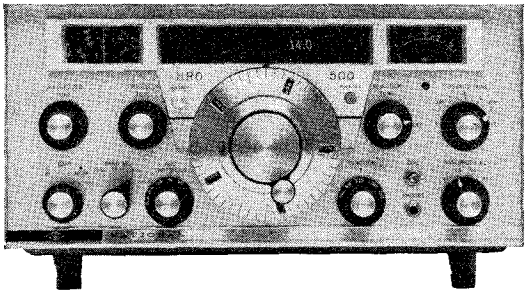
SPONSORS: Radio Commercials Workshop – Television Commercials Workshop – Basic and Advanced Time Buying & Selling Seminars – College Conference – Broadcasting and The Law Seminar – Others developing.

INTERNATIONAL RADIO & TELEVISION SOCIETY, INC.
444 Madison Avenue New York, New York 10022

Unmatched versatility for communications, surveillance, systems design, or laboratory instrumentation . . .

NATIONAL'S NEW HRO-500 HF/VLF RECEIVER IS TOTALLY SOLID STATE... OUTPERFORMS CONVENTIONAL TUBE UNITS... AND IS FAR LOWER IN COST!

National's new HRO-500 receiver is totally solid state for versatility, portability, and reliability. It incorporates a phase-locked frequency synthesizer to cover the extraordinary range of 5 kilocycles to 30 megacycles in sixty bands, with identical stability, tuning rate, and high calibration accuracy throughout. Complete SSB/CW/AM facilities are provided, as well as all necessary outputs for operation of ancillary equipment. ■ Total solid state design provides remarkable versatility and reliability, as well as simplified power and cooling requirements. The HRO-500 operates directly from either 115/230 V.A.C. or 12 V.D.C. sources (12 volt current drain is only 200 ma at low audio output with pilot lamps switched off). Transistors provide instant-on operation without delay or warm-up drift. ■ Entire VLF and HF spectrums . . . from 5 Kc to 30 Mc . . . are tuned continuously with 1 Kc dial calibration and 10 Kc per turn tuning rate. The HRO-500 provides better than 1.0 μv for 10 db S/N SSB/CW sensitivity with 60 db minimum image rejection (optional LF-10 preselector is recommended for optimum VLF performance). Effective dial scale length is 24 feet per megacycle, with $\frac{1}{4}''$ spacing between one-Kc calibrations. ■ Frequency is determined by a phase-locked crystal frequency synthesizer, which eliminates multiple crystal oscillators for high frequency oscillator injection. All HFO signals are synthesized from the output of a 500 Kc master crystal oscillator for maximum stability and elimination of band-to-band recalibration. Long-term stability from turn-on is equal to that of the best tube-type commercial receivers *after* warm-up. ■ Dynamic range and cross-modulation characteristics are equivalent to, or better than, many competitive tube-type receivers of similar sensitivity. ■ The HRO-500 provides superb SSB/CW/FSK performance with separate product detector, fast-attack, slow-decay AGC, and selectable sideband. The tunable filter provides four discrete I.F. bandwidths of 500 cps, 2.5, 5.0, and 8 Kc, with nominal 6-60 db shape factor of 2.5:1. *Passband Tuning* is provided in the 500 cps and 2.5 Kc bandwidths, for selectable sideband or single-signal reception without change in frequency or beat-note. ■ The HRO-500 is compact in size and light in weight: $7\frac{5}{8}''$ H, $16\frac{1}{2}''$ W, $12\frac{3}{4}''$ D; weight only 32 lb. A rack mounting kit is available for standard $8\frac{3}{4}''$ RETMA panel. ■ Write to National for detailed information, performance data, and complete specifications.



NATIONAL RADIO COMPANY, INC.

DEPARTMENT H ■ 37 WASHINGTON STREET, MELROSE, MASSACHUSETTS 02176

WORLDWIDE EXPORT SALES: ALRIEMA INTERNATIONAL GROUP, 85 BROAD STREET, NEW YORK CITY, U.S.A.

24 h exc. Sun 07.00–12.40. **N:** Every half h 05.00–13.00 and 14.00, 15.00, 16.00, 17.00, 18.00, 19.00, 20.00, 21.00, 22.00, 23.00, 23.30, 04.00.

22) **Peace River Broadc. Corpo,** First Str, Peace River, Alta. **V.** by QSL-card or letter. **Pub:** Prgr.schedule free.

23) **CFCL Ltd,** P.O. Box 620, Timmins, O. **L.P:** Dir. Gen: J. C. Lavigne. St. Mgr: P. Stein. Dir. Tec: F. Palmer. **D.Prgr:** 11.00–05.00 **N:** 11.00, 11.30, 12.00, 12.30, 12.55, 14.00, 15.00, 15.55, 17.00, 17.30, 18.00, 18.55, 21.00, 22.00, 23.00, 23.30, 03.00, 04.00. **V.** by QSL-card.

24) **Trans Canada Communications Ltd,** P.O. Box 6200, Regina, Sa. **L.P:** St. Mgr: J. Struthers. Dir. Tec: H. Dean. **D.Prgr:** 24 h. **N:** Every h on the h. **V.** by QSL-card.

25) **Colonial Broadc. System Ltd,** Grand Falls, Nf.

26) **Island R. Broadc. Co. Ltd,** 85 Kent St, Charlottetown. PEI. **L.P:** St. Mgr: R. F. Large. Dir. Tec: G. M. Tait. **D.Prgr:** 24 h. **V.** by letter. Rp.

27) **Great Lakes Broadc. Ltd,** 42 King St. West, Chatham. O.

28) **R. Station CHED Ltd,** 10006 – 107th St. Edmonton, Al.

29) **La Tribune Inc,** 221 Dufferin St, Sherbrooke, Qu.

30) **Rideau Broadc. Ltd,** Smith Falls, O.

31) **Transcanada Communications Ltd,** 300 Carlton St, Winnipeg. Man. **D.Prgr:** 24 h. **V.** by QSL-card and letter.

32) **R. Edmonton Ltd,** 10012 – 109e Rue, Edmonton. Al. **L.P:** St. Mgr: B. J. Gagnon. Dir. Tec: A. Rouleau. **D.Prgr:** 13.50–07.05 in French. **N:** 13.55, 14.28, 15.00, 15.28, 16.00, 17.00, 18.00, 19.15, 20.28, 21.00, 22.00, 23.00, 00.00, 00.30, 00.55. **Ukrainian:** 05.00. **Dutch:** 04.30(Sat), 21.00(Sun). **Italian:** 19.30(Sun). **Polish:** 22.00(Sun). **German:** 22.30(Sun).

33) **Newfoundland Broadc. Co. Ltd,** Prince of Wales St, St. Johns, Nfld. **D.Prgr:** 24 h. **N:** on the h – 34) **R. CJOB Ltd,** 930 Portage Ave, Winnipeg 10, Man – 35) **Timmins Broadc. Ltd,** Thomson Bldg, Timmins, O – 36) **Rogers Broadc. Ltd,** 13 Adelaide St. East, Toronto, O.

37) **R. Gravelbourg Ltée,** Gravelbourg, Sa.

38) **R. Témiscamingue Inc,** Rue-Saint-Anne, Ville-Marie, Qu.

39) **La Compagnie de Publication de "La Presse" Ltd,** 980 rue Sainte-Catherine-Ouest, Montréal, Qu. **L.P:** Dir. Gen: M. F. Doré, St. Mgr: M. F. Biondi. Dir. Tec: M. L. Spencer. **D.Prgr:** Mon–Fri 10.55–06.05. Sat 10.55–07.05. Sun 12.55–06.05. **N:** Every h on the h 11.00–06.00 exc. 24.00; also 12.30, 13.30. **V.** by letter.

40) **Dauphin Broadc. Co. Ltd,** 3rd Ave, N. E, Dauphin, Man. 24 h.

41) **Moffat Broadc. Ltd,** 1006 Richards St, Vancuouver, BC. **D.Prgr:** 14.00–08.00. **N:** On the h. **V.** by letter.

42) **R. Dartmouth Ltd,** Dartmouth NS.

43) **Camrose Broadc. Co. Ltd,** Box 1600, Camrose, Al. **L.P:** St. Mgr: W. H. Holte. Dir. Tec: L. Olson. **D.Prgr:** 24 h. **N:** Every h on the h. **Ukrainian:** D. 04.00–05.00. **V.** by QSL-card. Recordings accepted. Rp.

44) **Cambrian Broadc. Ltd,** 336 Ash St, Sudbury, O. **D.Prgr:** 13.00–07.00 – 45) **CHAB Ltd,** 127 Main St, Moose Jaw, Sa. **D.Prgr:** 12.00–07.00.

46) **CHRC Ltée,** 1143 rue St. Jean, Québec 4, Qu. **L.P:** St. Mgr: A. Pelletier. Dir. Tec: A. Nadeau. **D.Prgr:** W 11.00–06.00 (Fri & Sat 07.00), Sun 12.30–06.00. **N:** 13.00, 18.00, 22.55, 03.30+headlines hourly 5 min before the h. **V.** by letter. Rp.

47) **CJAD Ltd,** 1407 Mountain St, Montreal, Qu. **L.P:** Dir. Gen: W. C. Thornton Cran. St. Mgr: H. T. McCurdy. Dir. Tec: E. Mott. **D.Prgr:** 24 h. **N:** On the h and 11.30, 12.30, 13.30, 17.30. **V.** by QSL-card – 48) **Lakehead Broadc. Co. Ltd,** Fort William, O.

49) **CKOK Ltd,** P.O. Box 338, Penticton, BC. **L.P:** St. Mgr: R. Robinson. Dir. Tec: H. McRae. Dir. Prgr: W. B. Heinrich. **D.Prgr:** 14.00–09.00. **N:** Every h on the h exc. 21.00, 22.00, 04.00, 05.00. Also at 14.30, 15.30, 16.30, 17.30, 18.30, 20.30, 21.30, 22.30, 01.30. **V.** by letter. Rp.

50) **Western Ontario Broadc. Co. Ltd,** 825 Riverside Dr, Windsor, O.

51) **Bentley Broadc. Co. Ltd,** 120A 16 Ave, No. Calgary, Al.

52) **Central Alberta Broadc. Co. (1961) Ltd,** 5405 Gaetz Ave, Red Deer, Al.

53) **R. Futura Ltd,** 211 Gordon Ave, Verdun, P.Q. **L.P:** Dir. Gen: J. Tietolman. Dir. Tec: M. Rouseau. **D.Prgr in English & French:** 24 h. **N:** 5 min before each h (English & French); 96.9Mc=The Good Music Station. **V.** by letter. Recordings accepted.

54) **Maple Leaf Broadc. Co. Ltd,** 848 Main St. East, Hamilton, O. **L.P:** St. Mgr: W. E. "Bill" Hall. Dir. Tec: E. Victor. **D.Prgr:** 24 h. **N:** 05.00, 06.00, 07.00, 08.00, 09.00, 10.00, 11.00, 11.30, 12.00, 12.30, 12.45, 13.30, 14.00, 15.00, 16.00, 17.00, 17.30, 20.00, 21.00, 22.00, 23.00, 24.00, 04.00. **V.** by letter.

55) **The Sudbury Broadc. Co. Ltd,** 166 Elm St. West, Sudbury, O.

56) **Lower St. Lawrence R. Inc,** 13 St. Jean Baptiste, Rimouski, Qu.

57) **Island Broadc. Co. Ltd,** 817 Fort St, Victoria, BC – **L.P:** St. Mgr: W. Guild. Dir. Tec: M. Doyle. **D.Prgr:** 24 h. **N:** every h on the h, and 14.30, 15.30, 16.30, 20.30, 00.35, 01.05, 01.35. **V.** by letter. **Pub:** Prgr.schedule free.

58) **Central Broadc. Co. Ltd,** CKBI Bldg, 10th St, Prince Albert, Sa.

59) **R. Nord Inc,** Val-d'Or (Que).

60) **Inland Broadc. Ltd,** 387 – 4th Ave, Kamloops, BC. **L.P:** St. Mgr: I. G. Clark. Dir. Tec: K. Reichenek. **D.Prgr:** 14.00–08.00. **N:** 5 min before the h and 20.10. **V.** by letter.

61) **Dinosaur Broadc. (1957) Ltd,** Broadc. Bldg, Drumheller, A. **L.P:** Gen. Mgr: T. Mayer. Dir. Tec: J. Bruin. **D.Prgr:** 12.30–08.00. **N:** Every 30 min's. **V.** by QSL-card or letter.

62) **CJCH Ltd,** 2885 Robie St, Halifax, NS. **D.Prgr:** 24 h. **N:** on the h.

63) **Algonquin R.-TV Co. Ltd,** 254 Queen St. East, Sault Ste. Marie, O.

64) **Fundy Broadc. Co. Ltd,** 68 Carleton St, Saint John, NB. **D.Prgr:** 10.00–05.00 (Sun 12.00–04.15). **V.** by letter.

65) **Edmonton Broadc. Co. Ltd,** 10123–104th St, Edmonton, Al. **L.P:** St. Mgr: J. D. Elton. Dir. Tec: G. Skutle. **D.Prgr:** 24 h. **N:** on the h. **V.** by QSL-card. Recordings accepted – 66) see 33).

67) **Yorkton Broadc. Co. Ltd,** 171 McDermot, Winnipeg, Man. (tr. at Yorkton, Sa). **L.P:** St. Mgr: G. G. Gallagher. Dir. Tec: H. Kerr. **D.Prgr:** 24 h.

68) **Interior Broadc. Ltd,** 3315 B. Barnard Ave, Vernon, BC.

69) **Barrie Broadc. Co. Ltd,** Box 519, Barrie, O. **L.P:** St. Mgr: R. C. Hunter. Dir. Tec: H. Atkinson. **D.Prgr:** 11.00–05.00. **N:** 11.30, 12.00, 12.30, 12.50, 13.30, 14.00, 15.00, 16.00, 17.00, 17.30, 18.00, 19.00, 20.00, 21.00, 22.00, 22.30, 23.00, 24.00, 01.00, 02.00, 03.00, 04.00, 05.00. **V.** by letter.

70) **Restigouche Broadc. Co. Ltd,** Bank of Nova Scotia Bldg, Campbellton, NB.

71) **CHER Broadc. Ltd,** Prince Str, Sydney, NS.

72) **Calgary Broadc. Co. Ltd,** 1301 – 17th Ave. S.W, Calgary.

73) **Maritime Broadc. Co. Ltd,** 5230 Tobin St, Halifax, NS. **L.P:** Pres: G. W. Dennis. St. Mgr: F. W. Arenburg. Dir. Tec: R. H. Parker. **D.Prgr:** 24 h. **N:** Every h and half h. **Ann:** "This is CHNS, CHNX where there's more to listen for". **V.** by QSL-card.

74) **Frontenac Broadc. Co. Ltd,** 170 Queen St, Kingston, O. **D.Prgr:** 10.30–06.30.

75) **La Compagnie de Radiodiff. CKCH de Hull, Ltée,** 72 Laval St, Hull, Qu.

76) **London Free Press Printing Co. Ltd,** 369 York St, London, Ont. **L.P:** Gen. Mgr: M. T. Brown. St. Mgr: W. Cornell. Dir. Tec: G. A. Robitaille. **D.Prgr:** 24 h. **N:** On the h. **V.** by letter (95.9Mc=Londons Fine Music Station).

77) **Kawartha Broadc. Co. Ltd,** Box 659, Peterborough, O. **L.P:** Mgr: W. Rewegon. Chief Eng: B. Crump. **D.Prgr:** 11.00–06.00. **N:** Every h on the h. **V.** by QSL-card. Rp.

78) **Maisonneuve Broadc. Corp. Ltd,** 1445 Drummond St, Montreal, Qu. **L.P:** Dir. Gen: G. Stirling. St. Mgr: D. Wall. Dir. Tec: C. Jarrette. **D.Prgr:** 24 h. **N:** Every h on the h. **V.** by QSL-card or letter.

79) **R. CKNW Ltd,** Windsor Hotel, New Westminster, BC.

80) **Cambrian Broadc. Ltd,** 2060 Halifax St, Regina, Sa.

81) **Acadia Broadc. Corpo, Ltd,** 399 King St, Bridgewater. **L.P:** St. Mgr: J. F. Hirtle. Dir. Tec: D. B. Hirtle. **D.Prgr:** 09.58(Sun 10.58)–04.15. **N:** 10.00, 10.30, 11.00, 11.30, 12.00, 13.00, 14.00, 15.00, 16.00, 16.30, 17.00, 18.00, 19.00, 20.00, 20.55, 22.00, 23.00, 24.00, 00.55, 03.00, 04.00. **V.** by QSL-card & letter. Recordings accepted. Rp.

82) **CFRB Ltd,** 2 St. Clair Ave West, Toronto, O. **L.P:** St. Mgr: J. Dawson. Dir. Tec: C. Eastwood. **D.Prgr:** 24 h. **N:** Every h on the half h. **Ann:** "CFRB, Toronto, 1010 on your dial, Ontario's authoritative news voice". **V.** by QSL-card. Rp. Recordings not wanted.

83) **R. Station CFGP,** 10008 – 103rd Ave, Grande Prairie, Al. **L.P:** Dir: C. A. Perry. Dir. Tec: J. de Roaldes. **D.Prgr:** 24 h. **N:** On the h. **V.** by letter.

84) **R. CHUM – 1050 Ltd,** 1331 Younge St, Toronto, O.

85) **Hyland R. TV Ltd,** 119 East St, Sault Ste. Marie, O.

86) **R. Saint-Boniface Ltée,** 607 rue Langevin, Saint-Boniface, Man. **L.P:** Dir: R. Couture. Dir. Tec: R. Brodeur. **D.Prgr:** 12.30–06.15 in French. **N:** 12.30, 13.00, 13.30, 13.55, 15.00, 16.00, 17.00, 18.00, 19.00, 21.00, 22.00, 23.00, 24.00, 01.00, 03.00, 05.00.

87) **Northwestern Broadc. Co. Ltd,** 1721 Main St, North Battleford, Sa.

88) **The Voice of the Prairies Ltd,** Broadc. House, Calgary, Al. Te: Area 404. **Telex:** 038-2637. **L.P:** St. Mgr: H. Gordon Love. Dir. Tec: R. W. Lamb. **D.Prgr:** 24 h. **N:** Hourly. **Ann:** "CFCN. The Voice of the Prairies, 1060 Radio". **V.** by QSL-card. Recordings accepted.

89) **CJLR Inc,** P.O. Box 4200, Quebec, Qu. **D.Prgr:** 12.00–09.00. **V.** by letter.

90) **Sarnia Broadc. (1964) Ltd,** 148½ N. Front St, Sarnia, O. **L.P:** Gen. Mgr: K. E. Monk. Dir. Tec: R. F. Cooke. **D.Prgr:** 11.00–06.00. **N:** 13.00, 23.00. **V.** by letter. Recordings accepted. **O. V.** by letter or QSL-card. Recordings accepted.

91) **Sask-Alta Broadc. Ltd,** 5036 – 50th St, Lloydminster, Al.

92) **Southern Alberta Broadc. Ltd,** 401 Mayor Magrath Drive, Lethbridge, Al. **L.P:** St. Mgr: H. W. Brown. Prgr. Dir: B. Mac Donald. **D.Prgr:** 12.00–09.00. **N:** Every h on the h and at 14.30, 15.30, 19.30, 22.30. **V.** by letter. Reports to Box 1090, Lethbridge.

93) **R. Iberville Ltd,** C.P. 1090, Jacques-Cartier, Qu. **L.P:** Gen. Mgr: P. P. Elie. Dir. Tec: E. Pattermann. **D.Prgr's:** 12 hrs (daytime only). **N:** 5 min before each h. **V.** by QSL-card or letter. Recordings accepted.

94) **R.St. CHQT Ltd,** Jasper Ave & 112th Str, Edmonton, Alta.

95) **CKWX R. Ltd,** 1275 Burrard St, Vancouver, BC.

96) **Bow Valley Broadc. Co. Ltd,** 804 – 16th Ave, SW, Calgary, Al.

97) **New Brunswick Broadc. Co. Ltd**, 85 Germain St, Saint John, NB.
98) **Wentworth R. Broadc. Co. Ltd**, 73 Garfield St, So. Hamilton, O. **L.P:** Dir. Gen: C. Sifton. St. Mgr: D. R. Dawson. Dir. Tec: L. Horton. **D.Prgr:** 24 h. **N:** Every h on the h and 12.30, 13.30, 14.30, 18.30, 00.30. **V.** by letter.
99) **CKTR (1958) Ltée**, Edifice Place Royale, 1350 Royale, Trois Rivieres. **L.P:** St. Mgr: C. Couture. Dir. Tec: H. Lapointe. **V.** by QSL-card and by letter. Rp.
100) **Western Manitoba Broadc. Ltd**, 2940 Victoria Ave, Brandon, Man.
101) **Lethbridge Broadc. Ltd**, 1015 – 3rd Ave, So. Lethbridge, Al.
102) **Capital Broadc. System Ltd**, P.O. Box 967, Victoria, BC. **D. Prgr:** 24 h. **V.** by letter. Rp.
103) **Moncton Broadc. Ltd**, Knights of Pythias Hall, Moncton, NB.
104) **La Compagnie de Radiodiff. de Matane Ltée**, 4 rue Saint Sacrement, Matane, Qu.
105) **Saskatoon Community Broadc. Co. Ltd**, Empire Hotel, Saskatoon.
106) **Southern Manitoba Broadc. Co**, P.O. Box 1000, Altona, Man. **L.P:** St. Mgr: E. Hildebrand. Dir. Tec: J. J. Pauls. **D.Prgr:** 12.00–07.00 in English, German, French, Italian, Russian, Dutch. **N. in English:** On the h and at 13.30, 18.30, 00.30. **V.** by QSL-card. Recordings accepted. **Rp. Pub:** Prgr.schedule free.
107) **The Sunwapta Broadc. Co. Ltd**, 16 Highway West, Edmonton, Al. **L.P:** St. Mgr: A. J. Hopps. Dir. Tec: T. E. Wadson. **D.Prgr:** 12.00–08.00. **N:** Every 30 min's 12.30–15.30, on the h 16.00–08.00, and at 19.20, 00.30. **V.** by QSL-card. Written reports preferred.
108) **Monarch Broadc. Co. Ltd**, Box 880, Medicine Hat, Al. **L.P:** St. Mgr: T. G. Gunter. Dir. Tec: S. Gaffney. **D.Prgr:** W 13.00–08.00. Sun 14.00–07.00. **N:** Every 30 min's. **German:** 14.30.
109) **Fraser Valley Broadc. Ltd**, 50 Yale Rd. East, Chilliwack, BC.

110) **Cape Breton Broadc. Ltd**, R. Bldg, 318 Charlotte St, Sydney, NS. **Te:** (902) 564-5596. **Telex:** 014-4595. **L.P:** Gen. Mgr: N. L. Nathanson. Dir. Tec: A. Vernon. **D.Prgr:** 09.00–05.00.

111) **CHfQ Ltd**, Hamilton, O.
112) **CJMS R. Montreal Ltd**, 1700 Berri St, Montreal, Qu. **L.P:** Gen. Mgr: R. Demers. **D.Prgr:** 24 h in French. **N:** Every half h. **V.** by letter.
113) **CKCV (Québec) Ltd**, 978 rue Saint-Jean, Quebec. **L.P:** Dir. Gen: M. Alain. Dir. Tec: L. Gobeil. **D.Prgr:** 11.00–07.00 in French. **N:** Every half h. **V.** by letter. Rp.
114) **R. Station CFGM**, 50 Yonge St. North, Richmond Hill, O. **L.P:** St. Mgr: S. H. Coxford. Dir. Tec: G. Symons. **D.Prgr:** 24 h. **N:** On the h and headlines on the half h. **V.** by letter or QSL-card. Rp.
115) **CHGB Ltée**, 508 4th Ave, La Pocatiere. **L.P:** St. Mgr: G. T. Desjardins. Dir. Tec: M. A. Freve. **D.Prgr:** French: 11.00–05.00. **N:** Every h on the h. **V.** by letter. Recordings accepted.
116) **CKOY Ltd**, 635 Richmond Rd, Ottawa, O.
117) **Vancouver Broadc. Associates Ltd**, Vancouver, BC.
118) **R. Richelieu Limitée**, 72, rue du Roi, Sorel, P.Q.
119) **Hector Broadc. Co. Ltd**, 130 George St, New Glasgow, NS.
120) **Lakeland Broadc. Co. Ltd**, 16 Centre St, Oshawa, O.
121) **Bathurst Broadc. Co. Ltd**, 455 Golf St, Bathurst, NB.
122) **St. Lawrence Broadc. Co. Ltd**, 99 Brock St, Kingston, O.
123) **The Telephone City Broadc. Ltd**, 571 West St, Brantford, O. **L.P:** Gen. Mgr: R. D. Buchanan. Dir. Tec: J. A. Featherston. **D. Prgr:** 10.30(Sun 11.30)–06.00. **N:** 10.30, 11.00, 11.30, 12.00, 12.30, 13.00, 13.30, 14.00, 15.00, 16.00, 17.25, 20.00, 21.55, 23.00, 24.00, 02.00, 04.00, 05.00, 06.00. **V.** by QSL-card. Recordings accepted.
124) **R. CJFP Ltée**, 1 Christophe Colomb St, Riviere-du-Loup, Qu.
125) **Chateau Broadc. Co**, 2015 Drummond St, Montreal 25, Qu. **L.P:** Pres & Gen. Mgr: C. G. Stanzcykowski. **D.Prgr:** 10.00–06.00 on English/French. **N:** 5 min's before the h. **Italian:** D 23.00 Sun 13.30–17.00. **German:** 01.30 (exc. Mon), 19.00(Sun). **Greek:** D 02.00 Sat 14.30, Sun 13.00. **V.** by letter.
126) **R. CFUN Ltd**, 1900 W, 4th Ave, Vancouver 9, BC.
127) **London Broadc. Ltd**, 343 Richmond St, London, O.
128) **Foster Hewitt Broadc. Ltd**, 1 Greenville St, Toronto, O. **L.P:** St. Mgr: F. W. A. (Bill) Hewitt. Dir. Tec: G. Wilson. **D.Prgr:** 24 h. **N:** On the h and every 30 min's at 12.00–14.00 & 22.00–24.00. **V.** by letter. Recordings not wanted. **Rp. Pub:** Prgr.schedules free.
129) **Confederation Broadc. (Ottawa) Ltd**. 140 Wellington St, Ottawa. **L.P:** St. Mgr: B. A. Savage. Dir. Tec: B. Thomas. **D.Prgr:** 24 h. **N:** 10.30, 11.00, 11.30, 12.00, 12.30, 13.00, 13.30, 14.00, 17.00, 17.30, 18.00, 21.30, 22.00, 22.30, 23.00, 23.30. **V.** by QSL-card. Recordings accepted.
130) **CJOY Ltd.** 50 Wyndham St, Guelph, O. **L.P:** Gen. Mgr: F. Metcalf. Dir. Tec: R. Nagyobb. **D.Prgr:** 24 hrs. **N:** on the h. **V.** by letter.
131) **R. Beauce Inc**, 30, rue Saint-Antoine, Ville Saint-Georges, Beauce County, Qu. **D.Prgr:** 11.00–04.00. **N. in French:** 5 min before the h. **V.** by letter. Rp.
132) **Lakeshore Broadc. Ltd**, Pointe Claire, Qu. **D.Prgr:** 10.00–06.00. **V.** by letter.
133) **Winnipeg Broadc. Associates Ltd**, 457 Main St, Winnipeg, Man. **L.P:** Dir. Gen: D. L. Croston. St. Mgr: H. R. Priddle. Dir. Tec: J. J.

WORLD PUBLICATIONS present

New Edition of the New Guide:

HOW TO LISTEN TO THE WORLD

This well-known handbook will help you with your hobby and enable you to understand and to solve all your problems. In the following we mention as exeamples a few of the subjects covered and there are numerous illustrations:

THE ART OF LISTENING TO THE WORLD

By H.-J. Felbick, DL610, Germany.
A complete non-technical description of all problems connected with world-listening.

THE RADIO FREQUENCY SPECTRUM

By L. J. Prechner, Bsc., BBC, Engineering Division.
A survey and explanations about the use of all the radio frequencies in the radio frequency spectrum.

IONOSPHERIC DISTURBANCES

By L. J. Prechner, B 50, BBC, Engineering Division.
How the ionosphere is subject to disturbances is explained in this article.

THE STRUGGLE FOR FREQUENCIES

By S. B. Duke, President Radio Canada Shortwave Club. Supervisor Radio Canadas Engineering Division. There are not enough shortwave frequencies to satisfy all demands. This article is an illustration to the discussion: Frequency Management.

MOST SUITABLE METREBANDS IN 1967

Described and explained in text and tables for each part of the world by Mr. Roger Legge, Frequency Division, Voice of America.

INTERFERENCE AND YOU

By S. B. Duke, Supervisor Radio Canadas Engineering Division. Description of the different types of interference.

INTERFERENCE PROTECTION

By Hans-Joachim Felbick, Deutsche Welle.
A description on how to reduce interference and how to built antenna filter.

PRINCIPLES OF ALL RECEIVER TYPES

Selection of a receiver for a particular purpose. Understand the limitations and the capabilities of a receiver. By Paul Harris, G3GFN, England.

METHODS FOR RECEIVER CALIBRATION

By Jim Vastenhaud, Holland.
Tuning the shortwave bands is difficult today on account of the many stations. The need for checking frequencies is therefore obvious. In this article different methods for calibration of a receiver are explained.

HOW TO IDENTIFY STATIONS AND WHAT TO LISTEN FOR

A survey about Identification, program details and how to report.

Please write for brochures.
Price: Da.Kr. 22.50, US $ 3.25, £ 1/6/0, DM 14.50, Sw.Kr. 16.50. Postage extra: Da.Kr. 1.75, US $ 0.25, £ 0/1/6, DM 1.00, Sw.Kr. 0.90.

Obtainable from your bookseller or direct from

WORLD PUBLICATIONS

Lindorfsallé 1, Hellerup, Denmark

Telephone: Hellerup 3808 - Cable: World Publications, Hellerup, Denmark
USA agency: Gilfer Associates, Box 239, Park Ridge, New York, USA

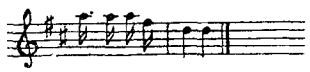
MORE INFORMATION on page 82 and 139

Pouls. **D.Prgr:** D. exc. Mon 24 h. Mon: 12.00–06.00. N: Every h on the h and 12.30, 13.30, 14.30, 18.30. V. by QSL-card.
134) **Kitchener-Waterloo Broadc. Co. Ltd,** 125 King St. W, Kitchener. **L.P:** St. Mgr: R. Bambury. Dir. Tec: W. Graham. **D.Prgr:** 24 h. V. by letter. Recordings accepted. **Pub:** Prgr.schedules free.
135) **R. 1540 Ltd,** 637 Collège Str., Toronto, Ont.
136) **Great Lakes Broadc. Ltd** 241 W. St. No, Orillia, O. **L.P:** Dir. Gen: D. G. Hildebrand. St. Mgr: D. A. Johns. Dir. Tec: J. Profit. **D.Prgr:** 24 h. **N:** Every h on the h. Also 11.30, 12.30, 13.30, 17.30, 23.30. V. by QSL-card.
137) **Nanaimo Broadc. Ltd,** Malaspina Hotel, Front St, Nanaimo, BC.
138) **R. Laval Inc,** 1184 St. Catherine St. West, Montreal.
139) **R. Niagara Ltd,** Park Motor Hotel, Clifton Hill, Niagara Falls, O. **D.Prgr:** 10.30(Sun 12.00)–05.00. **Italian:** Tues–Sat 00.30–01.00, Sat 21.30–22.00. **Hungarian:** Sat 20.00–20.30. **Ukrainian:** Sat 20.30–02.30. **Sun:** mixture of English and other languages. V. by letter. Rp.

GREENLAND (Danish Territory)

L.T: GMT –3h – **Pr.L:** Greenlandic, Danish.

GRØNLANDS RADIO (Gov).
ADDR: Grønlands Radiofoni, Godthåb. **Te:** 1172. **Cable:** Radiofoni – **L.P:** Dir. Broadc. Fr. Nielsen. Dir. Tec: E. Hecksher. Tech. Dept: K. Sivertsen.
STATIONS:
Godthåb 570kc 526 m 25kW – Godhavn 650kc 461.5m 5kW. – Frederikshåb 820kc 365.9m 5kW – Godthåb **FM** 97.2Mc o.25kW.
Shortwaves: Godthåb (G.C: 51.44W/64.10N) 1.5kW: 3999kc 75.02m d(So) – 5960kc 50.34m d(Ea) – 5980kc 50.17m d(No).
All mw-prgr's are radiated over sw-tr's with dir. aerials towards Ea, So, & No.
HOME SCE: W 10.30–11.30, 15.00–16.05 (Sat 16.30), 20.30 (Tues, Thurs, Sat 18.00)–02.20 (Sat 03.00). Sun 11.30–12.30, 15.00–16.30, 17.00–18.00, 19.00–02.20 – **N:** W 11.00, 15.30, 21.40, 01.40. Sun 22.00, 01.40 – **Wrp:** W 10.40, 16.00, 21.15, 02.15. Sun 11.30, 12.25, 16.25, 22.35, 02.15.
Norwegian: Sun 19.00–20.00 (only 10/4–12/6 & 4/9–27/11) – **Faroese:** Sun 20.00–20.40 – **For Schools** (3/10 66–15/3 67): Mon 12.00, 13.00, 14.00, 16.10, 20.15; Tues, Wed 13.00, 14.00, 16.10.
ANN: "Kalâtdlit-nunâta râdiua – Grønlands radio..." V. by letter or card. Rp – **INT-SIG:** "Sunia kaligpok" (The Whaleboat "Sonja" drags Whale) played on celeste.



SAINT PIERRE ET MIQUELON (French)

L.T: GMT – 3 h – **Pr.L:** French.

OFFICE DE RADIODIFFUSION TELEVISION FRANCAISE (ORTF)
ADDR: St. Pierre et Miquelon. **Te:** 051. **Cable:** ORTF. **L.P:** Dir: C. Ballon. Dir. Tec: L. Langlois.
STATION: 1375kc 218.2m 4kW.
HOME SCE. in French: 10.00–11.30, 12.30–23.00(Sun only), 15.00–16.30(Sat 18.00), 21.30–01.00(Sat 02.00) – **N:** 10.00, 11.00, 15.25, 23.00 – **Wrp:** 15.35, 23.00, 23.30 – **ANN:** "Ici St. Pierre et Miquelon office de Radiodiff. Télévision Francaise" – **INT-SIG:** as France Inter (ORTF) – V. by letter. Recordings accepted.

UNITED STATES OF AMERICA

L.T: See World Time Table – **Pr.L:** English.

VOICE OF AMERICA (Gov.)
""THE VOICE OF AMERICA" is operated by the Broadcasting Service of the United States Information Agency. The VOA seeks to promote an increased understanding of the United States among the peoples of the world and to strengthen cooperative international relations.
ADDR: Voice of America, U.S. Information Agency, Washington, D.C. 20547 USA.
L.P: Dir. U.S. Information Agency: Leonard H. Marks. Dir. Broadc. Sce: John Chancellor. Prgr. Mgr: Francis S. Ronalds. Engineering Mgr: Edgar T. Martin. Dir. TV (Motion Picture) Sce: George Stevens Jr.

STATIONS: Call-letters not used.
Delano (50/100/200kW): Delano, California – **Dixon** (50/100/200kW): Dixon, California – **Bethany** (110kW): Bethany, Ohio – **Greenville** (50/250/500kW): Greenville, No. Carolina – **Marathon,** Florida (50kW – 1180kc).
Geographical Coordinates: Delano 119.17W/35.45 N; Dixon 121.45W/38.23 N; Bethany 84.21W/39.21 N; Greenville 77.22W/35.35 N.

East Coast Stations: Unmarked: Greenville, * Bethany.

kc	m	kc	m	kc	m	kc	m
5995	50.04	9670	31.02	11955	25.09	15415	19.46
6020	49.83	9695	30.94	15130	19.83	15430	19.44
*6030	49.75	9710	30.90	*15160	19.79	17710	16.94
6045	49.63	9725	30.85	15205	19.73	17740	16.91
6055	49.55	9760	30.74	15230	19.70	17750	16.90
6125	48.98	9770	30.71	15235	19.69	*17765	16.89
6190	48.47	11760	25.51	15245	19.68	17780	16.87
*6190	48.47	11770	25.49	15250	19.67	17800	16.85
9525	31.50	11830	25.36	15280	19.63	17830	16.83
9530	31.48	11845	25.33	*15330	19.57	17875	16.79
9560	31.38	11870	25.27	*15380	19.50	17890	16.77
9565	31.36	11880	25.25	*15385	19.50	21600	13.89
9590	31.28	11890	25.23	15395	19.49	*21610	13.88
9635	31.14	*11890	25.23	15400	19.48	*21650	13.86
9640	31.12	*11940	25.13	15410	19.47	21740	13.80
*9650	31.09						

West Coast Stations: Unmarked = Delano. * Dixon.

kc	m	kc	m	kc	m	kc	m
*5965	50.29	*9665	31.04	11965	25.07	*17795	16.86
*5985	50.13	9700	30.93	15275	19.64	17800	16.85
6065	49.46	9760	30.74	*15290	19.62	17820	16.84
6085	49.30	11790	25.45	15365	19.52	17850	16.81
*6145	48.82	11805	25.41	*15395	19.49	21460	13.98
6185	48.50	*11830	25.36	[3]*17735	16.92	21500	13.95
9545	31.43	11920	25.17	*17765	16.89	*21630	13.87
*9565	31.36						

Honolulu: See Hawaii.

RELAY STATIONS:
For freq's of the relay stations, refer to the individual countries: *Germany, Greece, Great Britain,* Liberia, *Morocco,* Ceylon, Philippines, Ryukyu Islands.

ANNOUNCEMENT: "This is the Voice of America is ann. in the language of the program in which it is given. The Station identification is ann. in English. USA: "You are listening to the Voice of America from Greenville, North Carolina...Bethany, Ohio...Delano, California ...Dixon, California".

INTERVAL SIGNAL:
Variations on the theme of "Columbia, the Gem of the Ocean". This musical symbol is played at the beginning of a transmission, during station breaks, and at the conclusion of a transmission.

VERIFICATION by QSL-card. No return postage required.

To Europe

	kc
ALBANIAN	
19.30–20.00	791/6150/7270/11780/15395
21.30–22.00	6150/7270/11790/11935/15395
ARMENIAN	
13.30–14.00	11710/15315/17800
15.00–15.30	11710/15315/17800
BULGARIAN	
04.00–04.15	6055/6080/7105/7270/9615/9770
05.15–05.30	6055/6080/7105/7270/9615/9770
20.30–21.30	791/6150/7270/11790/11935/15395
CZECH-SLOVAK	
04.30–04.45	1196/6055/6080/7105/7270/9615/9770
05.45–06.00	6055/6080/7295/7270/9615/9770
18.00–19.00	1196/5995/7235/9670/11960/15235/17875
21.00–21.30	5995/7235/9670/11770/11960/15235
ESTONIAN	
15.00–15.30	5995/9660/11960/15150/15235/17875
16.30–17.00	5995/7235/9660/11960/15235/17875
GEORGIAN	
13.00–13.30	11710/15315/17800
14.30–15.00	11710/15315/17800
GREEK	
17.00–17.30	791/1259/6015/6150/7295/11790/15150/15395/17815
HUNGARIAN	
04.15–04.30	1196/6055/6080/7105/7270/9615
05.30–05.45	6055/6080/7105/7270/9615
20.00–21.00	1196/5995/7235/9670/11960/15235
22.00–22.30	5995/7235/9670/11960/15235
LATVIAN	
16.00–16.30	5995/9660/11960/15150/15235/17875
17.30–18.00	5995/7235/9670/15235/17875

NEW!
NEW!
NEW!

Brand new and exciting radio programs are now being produced in London employing the best casts, writers and directors from England, Canada, Australia, and the U.S.A. Already in production are: –

DR. WHO –

Time and Space and the realms of the unknown are yet to be fully explored by mankind but their secrets are already known to one person, DR. WHO – Traveller Extraordinary. From the B.B.C.'s most successful television program comes the amazing DR. WHO available for the first time on radio as a 25-minute serial of which there are 52 episodes.

SEXTON BLAKE –

The most famous detective in the world. 52 episodes featuring SEXTON BLAKE and his assistant TINKER in hair raising new adventures. (Running time 25 minutes).

BRUCE COURAGE –

A fifteen minute daily spy thriller starring TOM ADAMS (latest film "The Second Best Secret Agent in the World"). BILL KERR (from "The Flying Doctor"). And attractive newcomer VALERIE KIRKBRIGHT.

One minute and five minute programs are also available including daily readings by HUGH BURDEN of the NEW ENGLISH BIBLE.

Scripts for all the above programs are available for translation into any language.

Further details can be obtained from our distributors: –

U.S.A., Caribbean, Africa
T.I.E. Sales Ltd.,
3 East 54th Street, N.Y. 10022
Area Code 212 HA 1-7730/1

Canada
General Production Services,
2 Belmont Street,
Toronto 5. Tel. 922-4177

Australia, New Zealand, Far East
Grace Gibson Productions,
3 City Mutual Building,
60 Hunter Street,
Sydney. Tel. BW 4661

STANMARK PRODUCTIONS LIMITED

21 Hertford Street, Park Lane, London W. 1. GROsvenor 5837/8

USA

LITHUANIAN	kc
15.30–16.00	5995/9660/11960/15150/15235/17875
17.00–17.30	5995/7235/9670/11960/15235/17875
POLISH	
04.45–05.00	1196/6055/6080/7105/7270/9615
06.00–06.15	6055/6080/7270/9615
19.00–20.00	1196/5995/9670/11960/11760/15235
21.30–22.00	5995/9670/11960/11760/15235
RUMANIAN	
17.30–18.30	791/6150/7270/11790/15395/17830
20.00–20.30	6150/7270/11790/11935/15395
RUSSIAN	
03.00–05.00	1196 (to 04.15)/6020/6040/6125/6150/7170/9560/9715
16.00–22.00	6040/6060/7170/9540/11710/15280/15315/17800
SERBO-CROAT	
18.30–19.30	791/6150/7270/11790/15395/17830
SLOVENE	
05.00–05.15	6055/6080/7105/7270/9615
06.15–06.30	6055/6080/7295/7270/9615
UKRAINIAN	
14.00–14.30	11710/15315/17800
15.30–16.00	11710/15315

To Africa

ARABIC	kc
18.30–19.30	6035/11830/15250/15360/21600/21670
FRENCH	
06.00–07.30	(Mon-Fri) 6180/7280/9660
19.30–22.00	6035/7135/15360
SWAHILI	
17.00–18.30	15360/21670

To Near- and Middle East

ARABIC	kc
04.00–06.00	1259/6015/7130
17.30–21.30	1259/6015/7295
TURKISH	
16.30–17.00	1259/6015/7295/11790/15150/17815

To South Asia

BENGALI	kc
01.30–02.00*	11805/15175/15185/17830
02.00–02.30**	11805/15175/15185/17830
* To India	** To Pakistan.
HINDI	
14.30–15.00	7105/11835/15160/15445/17815/21690
15.30–16.00	7105/11790/11835/15160/15195/15445/17725/17815
TAMIL	
14.00–14.30	7105/11790/11835/15160/15445/21690
URDU	
15.00–15.30	7105/11835/15160/15445/17815/21690
16.00–16.30	7105/11790/11835/15195/17815/21690

To Far East

BURMESE	kc
00.30–01.30	15175/17830/21570
06.00–07.00	11930/15155/17830/21570
12.00–13.00	11930/15250/17765
15.30–16.30	11930/15250/17765
CAMBODIAN	
13.00–14.00	11930/15250/17765
CHINESE	
22.30–23.00 }	6075/7175/7275/9665/9700/11730
23.30–24.00 }	
00.30–01.00 }	11715/17750/17850/21630
10.00–11.00	6010/7275/9740/11965/15410/17765
11.00–16.00	6010/7135/7235/7275/9655/9740
INDONESIAN	
22.30–23.30	7240/9665/11805
07.00–08.00	11930/15155/17830
11.00–12.00	11930/15250/17800/17765/21670/21530
12.00–13.00	17800/21530/21670
14.30–15.30	11790/11930/15195/15250/17765/21670
KOREAN	
21.30–22.00	6075/7175/9580/15290/17850
22.30–23.00	7175/9615
13.00–13.30	6010/6145/9545
14.00–14.30	1178
LAOTIAN	
23.30–00.30	9665/11805/15175
RUSSIAN	
09.00–10.00	6010/6145/9545/15210/15410/17765
THAI	kc
23.30–24.00	11730/15290/17750
14.00–14.30	11830/15250/17765
VIETNAMESE	
22.30–23.00	7275/9700/11730
04.30–05.00	9665/11875/15250
11.00–16.30	760/1140/7175/9530/11775

To Latin America

SPANISH	kc
11.00–14.00	1180/6190/9525/11890/15230/17830
22.30–23.00	(Mon-Fri) 1180/11955/15400
23.00–04.30	1180/6190/9670/9725/11955/15400
PORTUGUESE	
21.30–22.00	(Mon-Fri) 11830/15250/17805
22.00–01.00	11830/15250/17805

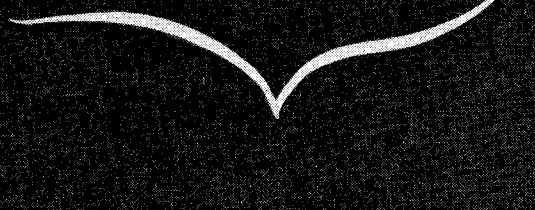
Programs in English

TO EUROPE	kc
03.00–07.30	1196(from 05.00) 3980/5965/5995/7200/7250/9540/ 9635/9740
14.00–16.30	3980/5965/7205/9760/15205/15290/17780/17855
16.30–22.15	1196(to 18.00)/3980/5965/7205/9760/15205/15290
22.15–23.30	1196/3980/7205/9760/11805
TO EAST AFRICA	
03.00–06.00	7195/7280/9600
06.00–07.30	7175/9600/17860
14.00–19.00	15270/15445/21460/(to 16.00)
19.00–22.15	15270/15445
TO SOUTH AFRICA	
14.00–18.30	15270(16.00–18.30)/15410/17710
TO WEST & CENTRAL AFRICA	
04.00–06.30	6035/7195/9600
06.00–07.30	6035/7175/9600/9635/11835
14.00–16.00	6035/11760/15270/17710/21485
16.00–18.00	6035/11760/15270/15360(to 1700)/15445
18.00–19.00	15270/15415/15445/17710/21485
19.00–22.15	3990/7195/15205/15270/15445
22.15–23.45	3990/6055/7195
TO MIDDLE EAST	
03.00–04.00	1259/5965/7200/7250/9540/9740
04.00–05.00	5965/7200/7250/9540/9740/
05.00–07.30	7200/7250/9540/9740/11790/15295
14.00–16.00	7205/15190/15290/17855
16.00–16.30	1259/5965/6015/7205/9760/15290/17855
16.30–23.30	1259(from 21.30)/5965/7205/9760/11805/15290/ 17855(to 18.00)
TO SOUTH ASIA	
01.00–03.30	7275/11835
12.00–14.00	7105/11835/15190/15285/17855/21455
14.00–16.00	15285/17855/21455
16.00–16.30	15285/17855
16.30–18.00	7110/7275/11835/17855
TO EAST ASIA	
22.00–02.00	7135/9580/11920/15365/17705/17850/21630
09.00–11.15	7165/9565/11735/11845/15155
11.15–13.30	7165/11735/11845/15155
13.30–16.30	5975/7165/9615/11735
TO SOUTH EAST ASIA & INDONESIA	
22.00–02.00	9545(to 23.00)/9580/15210/15365/17705/17860 (from 23.30)
09.00–13.30	11735/11845/15155
13.30–16.30	9615/11735/11850
TO OCEANIA	
22.00–02.00	17705/17795
09.00–12.30	5985/9665/11845
TO LATIN AMERICA	
23.00–03.30	6030/9565/9650/11830(from 01.00)/11890/15205

ARMED FORCES RADIO and TELEVISION SERVICE

ADDR: Hqs: Directorate of Armed Forces Information and Education, Washington D.C. 20305.

This office exercises over-all policy control of the Armed Forces Radio and Television Service. The mission of AFRTS is to keep U.S. Service men and women stationed outside the States the best informed service personnel in the world on current events. **All broadcasts are in English.** News, sports and other timely matter is beamed overseas directly by ten powerful tr. on the U.S. Atlantic and Pacific coasts. These s.w. broadcasts serve the overseas radio stations, which rel. them locally. Prgrs. other than news and locally produced prgrs. are derived directly from the U.S. Commercial radio and tv. networks. N. is compiled from the wires of A.P. and U.P.I. and include voice actuality and "from the scene" report segments.



THE VOICE OF AMERICA

1942 AT TWENTY-FIVE 1967

In 1942, VOA began broadcasting in five languages from 13 transmitters. Today, VOA broadcasts in 38 languages around the clock from 100 transmitters to tens of millions of listeners.

Today, as in 1942, VOA is dedicated to communicating truth.

U.S. INFORMATION AGENCY
WASHINGTON, D.C. 20547

WORLDWIDE SERVICE (from Washington, D. C.)
ADDR: Armed Forces News Bureau, 1117 N. 19th Street, Arlington, Virginia 22209. **L.P:** Chief: K. H. Logie; Associate Chief: Lt. Col. W. W. Coleman, USAF; Chief Engineer: E. F. Bove

Call	kc	kW	Beam	h of tr
BY 3	15330	110	Caribbean	13.30–22.45
BY 4	21650	110	No. Africa/Europe	13.30–20.45
BY 4	15330	110	No. Africa/Europe	21.00–22.45
GA 5	15430	250	Europe	13.30–18.45
GA 5	11870	250	Europe	19.00–22.45
GA 9	15430	50	No. Africa/Europe	13.00–22.45
DL 2	21500	50	Far East	21.30–02.00
DL 3	17765	50	Far East	21.30–04.15
DL 3	9700	50	Far East	04.30–16.30
DL 2	9760	50	Caribbean	07.15–14.00
DL 4	15275	100	Caribbean	22.30–01.45
DL 4	11805	100	Caribbean	02.00–07.00
DL 5	11805	100	Far East	03.00–07.00
DL 4	5965	100	Far East	07.30–16.30
Phil	15250	10	S. E. Asia	07.00–10.30

N: On the h and half-h – **Conference Call:** Mon-Fri 13.30, 22.30; Sat/Sun 13.30, 17.55, 22.30
ANN: "This is the Armed Forces News Bureau" – **V.** by QSL-card
PUB: Program sched. published quarterly, each new sched. available upon written request.

A.F.R.T.S.s OUTLETS BROADCASTING
Abbreviations: A=Army – AFKN=American Forces Korea Network – FEN=Far East Network – N=Navy – AF=Air Force – Fo=Fort – Cp=Cape.
The greater majority of the station operate from 06.00–24.00 L.T.

Location	Sce	kc	W
ALASKAN AREA			
*Adak	AF	890	250
*Anchorage	AF	860	50
Bethel	AF	1490	50
Campion	AF	570	250
Cp Lisburne	AF	1400	10
Cp Newenham	AF	1450	10
Cp Romanzof	AF	1240	10
Cp Sarichef	AF	1400	10
Chiniak	AF	1490	10
Cold Bay	AF	1490	10
Driftwood Bay	AF	1450	10
*Fairbanks	AF	1490	50
Fire Island	AF	1240	10
*Fo Greely	AF	980	50
Fo Richardson	AF	1360	10
Fo Wainwright	AF	1360	50
Fo Yukon	AF	1340	10
Indian Mountain I	AF	1240	10
Indian Mountain II	AF	1590	10
King Salmon	AF	790	250
*Kodiak	AF	960	250
Kotzebue	AF	1360	10
Murphy Dome	AF	1570	10
Nikolski	AF	1340	10
Nome	AF	590	400
Northeast Cape	AF	1450	10
Port Heiden	AF	1340	10
Port Moller	AF	1230	10
Shemya	AF	1240	100
Site Love	AF	1240	10
Sparrevohn	AF	1490	10
Tok Junction	AF	1490	10
Tin City	AF	1490	10
Unalakleet	AF	1400	10
Wildwood	AF	1530	10
CANADIAN AREA			
Labrador			
*Hopedale	AF	975	25
Newfoundland			
*Argentia	N	1480	50
CARIBBEAN AREA			
Canal Zone			
*Fo Clayton	A	790	5kW
Fo Davis	A	1420	1kW
Cuba			
*Guantanamo Bay	N	1340	1kW
Puerto Rico			
*Aguadilla	N	780	50
Juana Diaz	N	780	50
Roosevelt Roads	N	1200	50
*San Juan	N	1470	50
West Indies			
*Trinidad	N	1550	1kW
EUROPEAN AREA: see Germany, Greece and Spain.			
NORTH AFRICAN AREA			
Morocco			
*Kenitra	AF	1484	350
Libya			
*Tripoli	AF	1594	1kW
FAR EAST AREA			
Iwo Jima	AF	1500	100
Japan: see Japan – **Korea:** see Korea			
Philippine Islands			
Baguio	AF	1300	250
*Clark AB	AF	1520	1kW
*Mactan Island	AF	1300	10
*Sangley Point	AF	1220	250
*San Miguel	AF	1520	25
*Subic Bay	AF	1300	250
Ryukyu Islands			
*Okinawa	AF	650	10kW
Taiwan: see Taiwan			
MIDDLE EAST AREA			
Eritrea			
*Asmara	A	1480	100
Iran			
*Teheran	A	630	250
Pakistan			
*Peshawar	AF	870	25
Turkey			
*Diyarbakir	AF	1570	50
*Karamursel	AF	1590	50
*Trabzon	AF	1590	25
ATLANTIC AREA			
*Ascencion Island	AF	1600	250
Azores			
*Terceira	AF	1500	250
Greenland			
*Sondrestrom	AF	1420	250
*Thule	AF	1425	1kW
Iceland			
Keflavik	N	1484	250
PACIFIC AREA			
*Eniwetok	AF	1385	250
Guam			
*Johnston Island	AF	1250	100
*Kwajalein	A	1220	1kW
*Midway Island	N	900	250
*Wake Island	AF	1490	250
SOUTHEAST ASIA			
Thailand			
*Korat	AF	1360	100
*Nakhon Phanom	AF	770	100
*Takhli	AF	1300	100
*Ubon	AF	770	100
*Udorn	AF	1410	100
Vietnam			
Ban Me Thout	A	1360	50
Can Tho	A	1360	50
Da Nang	A	1360	50
Duc My	A	1360	50
Gia Nghia	A	1360	50
Kontum	A	1360	50
Nha Trang	A	1360	50
Pleiku	A	1360	50
Quang Ngai	A	1360	50
Qui Nhon	A	1360	50
*Saigon	A	820	1kW
Soc Trang	A	1500	50

+11 **FM** st's not mentioned – *) studio st.

PRIVATE INTERNATIONAL STATIONS

INTERNATIONAL BROADCAST STATION KGEI

ADDR: P.O. Box 15, San Francisco, Calif. **Te:** 591–4820. **Cable:** Febcom-Sfran – **L.P:** St. Mgr: J.R.Bowman. Dir. Tec: J. L. Brooks. Dir. Prgr: S.P. Jeter.
STATIONS (Belmont – G.C: 122.14W/37.33N) d, Latin America: 50kW 9715kc 30.88m – 11710kc 25.62m – 15240kc 19.69m.
LATIN AMERICA SCE: W 22.15–05.00, Sun 22.15–03.00 on 15240 kc, on 11710kc from 03.00.
N. in English-Spanish: Mon/Wed/Fri 23.50–00.05, Tues/Thurs 23.30–00.05 – **English:** Mon-Fri 22.30–23.00, 04.47–04.53; Sat 22.30–23.00, 23.30–24.00, 03.45–04.30; Sun 22.30–23.00, 23.30–24.00, 03.30–04.00 – **Portuguese:** Mon/Wed/Fri 22.30–23.45 – **Russian:** D 23.00–23.30. **N. in Spanish:** W 00.00, 01.00, 02.00 (exc. Sat), 03.00 03.30 **L.L:** (English by Radio): W 00.05–00.30, 03.05–03.30.
ANN: E (Sign on): "This is the Voice of Friendship, International broadc. st. KGEI, San Francisco, Calif, the United States of America, owned and operated by the Far East Broadc. Company on a freq. of ... KGEI is dedicated to the purpose of promoting good will, better understanding and friendship among the peoples of the Americas" – **INT-SIG:** Sign off with anthem "the Lords Prayer" followed by Nat. Anthem – **V.** by QSL- card (sent on request). Recordings and tapes accepted.
FI: By donations, non profit, non-comm. org's. KGEI (the Voice of Friendship) is owned and operated by Far East Broadc. Co. Inc. Whittier, California.

WORLD INTER-NATIONAL BROADCASTERS (WINB), INC.

ADDR: P.O. Box 88, Red Lion, Penna. 17356.
STATIONS: WIND 50kW 11795kc 25.43m – 17720kc 16.93m.
D.PRGR. in English (to Mediterranean, So. Europe, Near East, No. Africa): 17.00–20.00 on 17720kc, 20.02–22.00 on 11795kc – Comm. station which purpose is to promote the God of the Bible and Country.

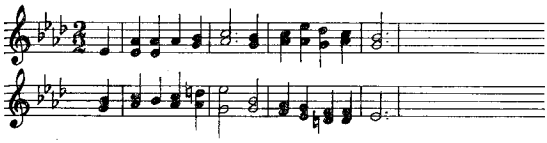
RADIO NEW YORK WORLDWIDE (WNYW) (Comm.)

ADDR: 485 Madison Ave, New York, N.Y. 10022. **Te:** (212) Plaza 2-3322. **Cable:** "Radioworld". **Telex:** 421047 (via IT&T and RCA). **L.P:** Pres: Arch Madsen. Exec. V. P.: Arthur Mortensen. V. P. & Gen. Mgr: Miller R. Gardner. V. P. Adm: Richard Grefe, V. P. & Secr: Robert Barker, Treasurer: Blaine Whipple. Act. Dir. Programming: Tito Arriagada. Dir. Tr. Eng.: Lou MacDonald. Dir. Studio Eng.: Joe Garafalo. Act. N. Dir: Mark Bench. Dir. Traf.: Barbara De Bella. Dir. Listeners Club: Irwin Belofsky. Field Correspondents in major Latin American Countries.
STATIONS: (G.C: 70.44W/42.13N): 50/80kW

kc	m	kc	m	kc	m	kc	m	kc	m
6015	49.88	9695	30.94	11790	25.45	15265	19.66	17755	16.90
9615	31.20	9740	30.80	11855	25.31	15440	19.43	17845	16.81
9685	30.98	11740	25.55	11970	25.06	17730	16.92	21530	13.93

ENGLISH SCE:
To Europe: W: 11.44–13.55 on 15265/15440/17845kc, 13.55–15.55 on 15440/17845kc, 15.55–21.00 on 15440/17755kc, 21.00–21·07 on 15440kc, 21.15–21.30 on 11970kc, 21.30–23.10 on 9740/11970kc, 23.10–00.45 on 9740kc. **Sun:** 12.00–13.55 on 15265/17845kc, 13.55–14.00 on 17845kc, 14.00–15.55 on 15440/17845kc, 15.55–16.00 on 15440kc, 16.00–21.00 on 15440/17755kc, 21.00–21.10 on 15440kc, 21.15–21.30 on 11970kc, 21.30–00.15 on 9740/11970kc.
To Africa: W: 11.45–14.30 on 17845kc, 14.45–21.15 on 21530kc, 21.30–23.15 on 15440kc. **Sun:** 12.00–12.45 on 17845kc, 13.00–19.15 on 21530kc, 19.30–21.15 on 17755kc, 21.30–23.15 on 15440kc.
To Latin America: W: 11.44–00.45 on 15440kc. **Sun:** 12.00–15.55 on 15440/17730kc, 15.55–16.00 on 15440kc, 16.00–23.15 on 15440/17845kc, 23,15–23.30 on 15440kc, 23.30–00.15 on 11855/15440kc.
N: On the h with three 15 min "Chronoscopes" at 14.00, 18.00, 23.00 – **"Unity View point": W** 11.45 – **N.Comm:** Mon–Fri 18.50 & 19.00 – **"American Magazine of the Air": W** 12.00–24.00 (a musical variety show with features, interviews and N about the US) – **DX-ing Worldwide:** Sat 23.07, Sun 16.07 – **Hawaii Calls:** Sun 13.30 – **Mormon**

Tabernacle Choir: Sun 20.07 – **Unto Every Nation:** Sun 19.07 – **ABC's Issues & Answers:** Sun 17.30 – **ABC's World of Space and Science:** Sun 18.30.
SPANISH SERVICE (to Latin America) – **W:** 12.00–17.00 on 17730kc, 17.00–23.15 on 17755kc, 23.15–23.30 on 9615kc, 23.30–01.00 on 9615/11855kc, 01.00–04.00 on 9615/9695/11740/11855kc. **Sun:** 00.30–04.00 on 9615/9695/11740/11855kc.
"American Magazine of the Air": W 12.00–01.30 with N. on the h – **"The World of Cars & Drivers":** Mon 00.30 – **"The Furrow of the Air":** Sat 00.30 – **Special Cuban Prgr's:** D. 01.30–03.00 – **Mormon Tabernacle Choir** ("Music & The Spoken Word") Mon 03.30 – **"Unto Every Nation":** Sun 03.30.
CREOLE SERVICE: W 11.00–11.30 on 9685/11790kc.
ANN: E: "This is R. New York Worldwide New York WNYW". Sp: "Esta es R. Nueva York WNYW transmitiendo programas en español desde la ciudad de Nueva York" – **INT-SIG:** Trumpets.



V. by QSL-card; recorded reports (single track tape only) accepted from outside the USA – **PUB:** Illustrated Prgr. Guide offered free. Write to R. New York Worldwide, N.Y. 10022. Advance prgr. and freq. information available to members of the R. New York Worldwide Shortwave Listeners Club. Yearly dues: $ 1.00, or equivalent in other currencies. Monthly bulletin and club services available to all members. For further info. write to the SWL Club, R. New York Worldwide, 485 Madison Ave., New York City 10022, USA.

NATIONAL ASSOCIATION OF BROADCASTERS

ADDR: 1771 N. Street N.W. Washington, D.C. 20036 – **Te:** Decatur 2-9300.
Purpose: The purpose of the Association is to foster and promote the development of the arts of aural and visual broadc. in all its forms to protect its members in every lawful and proper manner from injustices; to do all things necessary and proper to encourage customs and practices which will strengthen and maintain the broadc. industry to the end that it may best serve the public.
L.P: Chmn: J. F. Dille, Jr. Pres: V. T. Wasilewski. Sec-Treasurer: E. E. Revercomb.

COMMERCIAL STATIONS

M.W. Stations operating with a power of 10kW and above.
The time each station is authorized to operate is indicated in the list. Each station is required to operate at least two-thirds of the hours it is authorized to operate between 6:00 AM and 6:00 PM, and two-thirds of hours it is authorized to operate between 6:00 PM and midnight. If authorized to operate unlimited time, it may operate for the entire 24 h.
Abbreviations: Ala. Alabama, Alsk. Alaska, Ariz. Arizona, Ark. Arkansas, Calif. California, Colo. Colorado, Conn. Connecticut, D.C. District of Columbia, Fla. Florida, Ga. Georgia, Haw. Hawaii, Ill. Illinois, Ind. Indiana, Kans. Kansas, Ky. Kentucky, La. Louisiana, Mass. Massachusetts, Md. Maryland, Mich. Michigan, Minn. Minnesota, Miss. Mississippi, Mo. Missouri, N.C. North Carolina, Nebr. Nebraska, N.Mex. New Mexico, N.Y. New York, Okla. Oklahoma, Oreg. Oregon, Pa. Pennsylvania, R.I. Rhode Island, S.C. South Carolina, S.Dak. South Dakota, Tenn. Tennessee, Tex. Texas, Va. Virginia, Wash. Washington, W.Va. West Virginia, Wis. Wisconsin.

Call	kW	
540		
WGTO	50	Cypress Gardens, Fla.
640		
KFI	50	Los Angeles, Calif.
650		
KORL	10	Honolulu, Haw.
WSM	50	Nashville, Tenn.
660		
KFAR	10	Fairbanks, Alsk.
WNBC	50	New York
WESC	10	Greenville, S.C.
670		
WMAQ	50	Chicago, Ill.
680		
KNBR	50	San Francisco, Calif.
WCBM	10	Baltimore, Md.
WNAC	50	Boston, Mass.
WPTF	50	Raleigh, N.C.
WMPS	10	Memphis, Tenn.
KBAT	50	San Antonio, Tex.
WCAW	10	Charleston, W.Va.
690		
WVOK	50	Birmingham, Ala.
WAPE	50	Jacksonville, Fla.
KULA	10	Honolulu, Haw.
KGGF	10	Coffeyville, Kans.
KHEY	10	El Paso, Tex.
WCYB	10	Bristol, Va.
700		
WLW	50	Cincinnati, Ohio
710		
KMPC	50	Los Angeles, Calif.
WGBS	50	Miami, Fla.
KEEL	50	Shreveport, La.
WHB	10	Kansas City, Mo.
WOR	50	New York
KGNC	10	Amarillo. Tex.
KIRO	50	Seattle, Wash.
720		
WGN	50	Chicago, Ill.
740		
WBAM	50	Montgomery, Ala.
KBIG	10	Los Avalon, Calif.
KCBS	50	S. Francisco, Calif.
WPAQ	10	Mt. Airy, N.C.
KRMG	50	Tulsa, Okla.
KTRH	50	Houston, Tex.
750		
KFQD	10	Anchorage, Alsk.
WSB	50	Atlanta, Ga.
KMMJ	10	Grand Island, Nebr.
KXL	50	Portland, Oreg.
760		
KGU	10	Honolulu, Haw.
WJR	50	Detroit, Mich.
770		
KOB	50	Albuquerque, N.Mex.
WABC	50	New York
780		
WBBM	50	Chicago, Ill.
810		
KGO	50	S. Francisco, Calif.
KCMO	50	Kansas City, Mo.
WGY	50	Schenectady, N.Y.
820		
WFAA	50	Dallas, Tex.
WBAP	50	Fort Worth, Tex.
830		
WCCO	50	Minneapolis – St. Paul, Minn.
840		
WHAS	50	Louisville, Ky.
850		
WYDE	10	Birmingham, Ala.
KOA	50	Denver, Colo.
WHDH	50	Boston, Mass.
WKIX	10	Raleigh, N.C.
WJW	10	Cleveland, Ohio
WJAC	10	Johnstown, Pa.
860		
KTRB	10	Modesto, Calif.
KOAM	10	Pittsburg, Kans.
WOAY	10	Oak Hill, W.Va.
870		
WWL	50	New Orleans, La.
880		
WCBS	50	New York
890		
WLS	50	Chicago, Ill.
900		
KFRB	10	Fairbanks, Alsk.
940		
KFRE	50	Fresno, Calif.
WINZ	50	Miami, Fla.
WMAZ	50	Macon, Ga.
KAHU	10	Waipahu, Haw.
KIOA	10	Des Moines, Iowa
WYLD	10	New Orleans, La.
WFNC	10	Fayetteville, N.C.
990		
KTKT	10	Tucson, Ariz.
WHOO	10	Orlando, Fla.
WIBG	50	Philadelphia, Pa.
WLKW	50	Providence, R.I.
WNOX	10	Knoxville, Tenn.
KNIN	10	Wichita Falls, Tex.
1000		
WCFL	50	Chicago, Ill.
KOMO	50	Seattle, Wash.
1010		
KLRA	10	Little Rock, Ark.
KSAY	10	S. Francisco, Calif.
WINQ	50	Tampa, Fla.
WGUN	50	Decatur, Ga.
WMOX	10	Meridian, Miss.
KXEN	50	St. Louis, Mo.
KRVN	25	Lexington, Nebr.
WINS	50	New York
WFGW	10	Black Mountain, N.C.
KAWA	10	Waco, Tex.
1020		
KGBS	50	Los Angeles, Calif.
KSWS	50	Roswell, N.Mex.
KDKA	50	Pittsburgh, Pa.
1030		
WBZ	50	Boston, Mass.
KCTA	50	Corpus Christi, Tex.
1040		
WHO	50	Des Moines, Iowa
1050		
WHN	50	New York
1060		
KPAY	10	Chico, Calif.
WNOE	50	New Orleans, La.
KYW	50	Philadelphia, Pa.
1070		
WAPI	50	Birmingham, Ala.
KNX	50	Los Angeles, Calif.
WIBC	50	Indianapolis, Ind.
KFDI	10	Wichita, Kans.
WDIA	50	Memphis, Tenn.
WKOW	10	Madison, Wis.
1080		
KSCO	10	Santa Cruz, Calif.
WTIC	50	Hartford, Conn.
KWJJ	10	Portland, Oreg.
KRLD	50	Dallas, Tex.
WBIE	10	Marietta, Ga.
1090		
KAAY	50	Little Rock, Ark.
WBAL	50	Baltimore, Md.
KING	50	Seattle, Wash.
1100		
KFAX	50	S. Francisco, Calif.
WHLI	10	Hempstead, N.Y.
WKYC	50	Cleveland, Ohio
1110		
KRLA	50	Pasadena, Calif.
WALT	10	Tampa, Fla.
KFAB	50	Omaha, Nebr.
WBT	50	Charlotte, N.C.
1120		
KMOX	50	St. Louis, Mo.
1130		
KWKH	50	Shreveport, La.
WCAR	50	Detroit, Mich.
WDGY	50	Minneapolis, Minn.
WNEW	50	New York
WISN	50	Milwaukee, Wis.
1140		
KRAK	50	Sacramento, Calif.
WMIE	10	Miami, Fla.
KGEM	10	Boise, Idaho
KSOO	10	Sioux Falls, S.Dak.
WRVA	50	Richmond, Va.
1160		
WJJD	50	Chicago, Ill.
KSL	50	Salt Lake City, Utah
1170		
WCOV	10	Montgomery, Ala.
KCBQ	50	San Diego, Calif.
KVOO	50	Tulsa, Okla.

GEORGE P. ADAIR ENGINEERING COMPANY
CONSULTING ENGINEERS
Radio - Television - Communications - Electronics
DOMESTIC AND INTERNATIONAL
ENGINEERING
SERVICES
(202) 333-1116
Cable: GAENGCO
901-20th STREET N.W.
WASHINGTON 6, D.C.

Call	kW	
WWVA	50	Wheeling, W.Va.
KLOK	10	San José, Calif.
1180		
WHAM	50	Rochester, N.Y.
1190		
WOWO	50	Ft. Wayne, Ind.
WANN	10	Annapolis, Md.
KEX	50	Portland, Oreg.
KLIF	50	Dallas, Tex.
1200		
WOAI	50	San Antonio, Tex.
1210		
WKNX	10	Saginaw, Mich.
WCAU	50	Philadelphia, Pa.
1220		
WGAR	50	Cleveland, Ohio
1270		
KFJZ	50	Ft. Worth, Tex.
1500		
WTOP	50	Washington, D.C.
WJBK	10	Detroit, Mich.
KSTP	50	Minneapolis – St. Paul, Minn.
KPIR	10	Eugene, Oreg.
1510		
KALF	10	Mesa, Ariz.
WNLC	10	NewLondon,Conn.
WLAC	50	Nashville, Tenn.
KGA	50	Spokane, Wash.
WAUK	10	Waukesha, Wis.
1520		
KACY	10	Port Hueneme, Calif.
WKBW	50	Buffalo, N.Y.
WFYI	10	Mineola, N.Y.
KOMA	50	Oklahoma City, Okla.
KYMN	10	Oregon City, Oreg.
KXKW	10	Lafayette, La.
1530		
KFBK	50	Sacramento, Calif.
WCKY	50	Cincinnati, Ohio
KGBT	50	Harlingen, Tex.
1540		
KPOL	50	Los Angeles, Calif.
KXEL	50	Waterloo, Iowa
WPTR	50	Albany, N.Y.
KCUL	50	Fort Worth, Tex.
1550		
KFIF	50	Tucson, Ariz.
KKHI	10	S. Francisco, Calif.
WYOU	10	Tampa, Fla.
KOKA	10	Shreveport, La.
WOKJ	50	Jackson, Miss.
WBSC	10	Bennettsville, S.C.
1560		
KPMC	10	Bakersfield, Calif.
WQXR	50	New York
1570		
WOKZ	20	Alton, Ill.
1580		
KYND	50	Tempe, Ariz.
KDAY	50	Santa Monica, Calif.
WWIL	10	Ft. Lauderdale, Fla.
WAXU	10	Lexington, Ky.
WPGC	10	Bladensburg, Md.
WPAC	10	Patchogue, N.Y.

RADIO NETWORKS

ABC RADIO NETWORK (A division of American Broadcasting Companies, Inc.)
ADDR: 1330 Avenue of the Americas, New York, N.Y. 10019 – **L.P:** Pres: Robert R. Pauley. Natl. Dir. Programs: John Thayer. Vice Pres. Natl. Dir. Sales: Theodore Douglas. For executives of parent company, see television listing.
Owned and operated stations: WABC, New York; KABC, Los Angeles; KGO, San Francisco; WXYZ, Detroit; KQV, Pittsburgh; WLS, Chicago.

CBS RADIO NETWORK (A division of Columbia Broadcasting System, Inc.)
ADDR: 51 West 52nd Street, New York, N.Y. 10019 – **L.P:** Pres: Arthur Hull Hayes. Vice Pres: Programming: George M. Perkins. Vice Pres. Sales: George J. Arkedis. For executives of parent company, see television listing.
Owned and operated stations: WCBS, New York; WBBM, Chicago; KCBS, San Francisco; KMOX, St. Louis; KNX, Los Angeles; WEEI, Boston; WCAU, Philadelphia.

NBC RADIO NETWORK (A division of National Broadcasting Company).
ADDR: 30 Rockefeller Plaza, New York, N.Y. 10020 – **L.P:** Pres: Stephen B. Labunski. Dir. Sales: Lambert B. Beeuwkes. Vice Pres. Programs: Robert Wogan. For excecutives of parent company, see television listing.
Owned and operated stations: WNBC, New York; WRC, Washington; WJAS, Pittsburgh; WMAQ, Chicago; WKYC, Cleveland; KNBR, San Francisco.

MUTUAL BROADCASTING SYSTEM, INC. (A division of 3M Co.) – **ADDR:** 135 West 50th Street, New York, N.Y. – **L.P:** Pres: Robert F. Hurleigh, Vice Pres. news and Wash. opns: Stephen J. McCormick. Vice Pres, stations: Charles W. Godwin. Vice Pres. programs & opns: Charles A. King.

EDUCATIONAL ORGANIZATIONS

Department of Health, Education, and Welfare, Office of Education, Washington D.C.20202; Office of the Under Secretary: I. A. Nestingen.
The Educational Television Facilities Programme designed to encourage establishment of new and improved broadcast facilities through financial grants based on matching funds.
Office of Education, Media Research and Dissemination Branch, Ag. Dir: Th. D. Clemens. Educ. Media Specialist: Mrs. G. Broderick. provides a variety of services by professional staff specialists to schools and college officials, st. operators, and others, as requested. Under Title VII of the National Defense Education Act, finances research and experimentation in the educ. uses of all media; disseminates information on the subject through conferences, seminars, workshops, and publication of pertinent bulletins.

National Association of Educational Broadcasters (NAEB).
Headquarters: 1346 Connecticut Ave, N.W. Washington D.C. 20036. **Te:** 667-6000 – **Publications and Network Office:** 119 Gregory Hall, Urbana, Illinois 61803. Te: 333-0580.
L.P: Pres: W. G. Harley. Vice-Pres: H. E. Hill. Secr: James A. Fellows.
Stations: 224 educational institutions and organizations owning and operating a total of 230 educational radio and TV stations.
Fi: By membership fees. Also some support from outside sources for special research projects. The national independent professional association, which since 1925 has represented the interests and needs of educ. television and radio broadcasters, represents appr. 75% of the educ. st's and production centers of the United States (appr. 90% exc. those indentified as religious st.).
Activities and Functions: The NAEB is the Association of American institutions operating educational, cultural and public Sce's radio and TV st's and production centers. Publish a monthly Newsletter, a bi-monthly Journal and an annual yearbook/Directory. The NAEB also operates a radio network which duplicates via tape and distributes to members st's five hours of programming per week. At present there are some 135 st's in this network. Exchanges of prgr's with other nations are welcomed. It also actively cooperates with various intern. organizations (European Broadcasting Union, UNESCO etc.), and the national systems of various other countries. According to FCC regulations, non-comm. educational FM st's have no restrictions on transmission time.

GOVERNMENT AGENCY:

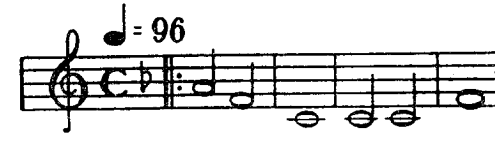
THE FEDERAL COMMUNICATIONS COMMISSION (FCC) – the licensing agency for broadc. st's – **ADDR:** P.O. Dept. Bldg, Washington 20554, D.C. – **L.P (key officials):** Chmn: Rosel Hyde. Exec. Dir: M.D. Paglin. Secr: B.F. Waple. Chief, Broadcast Bureau: G.S. Smith.
The FCC is an independent Federal agency, composed of seven Commissioners appointed by the Pres. by and with the advice and consent of the Senate. One of its major activities is the general regulation of broadc. – now visual as well as aural. This regulation may be divided into three phases: 1) The allocation of spectrum space to the different types of broadcast services, 2) Considerations to build and operate individual stations, 3) Regulating their operation.
Call letters. – International agreement provides for the national identification of the radio st. by the first letter or first two letters of its assigned call signal, and for this purpose apportions the alphabet among different nations. USA st's use the initial letters K, N, and W, exclusively, and part of the A series. Broadcast st's are assigned call letters beginning with K or W. Generally speaking, those beginning with K are assigned to st's west of the Mississippi River and in the territories and possessions, while W is assigned to broadcast st's east of the Mississippi.
Number of broadc.st's in the USA as of July 1st, 1966.

	Authorized	Operating
AM	4153	4075
FM Commercial	1744	1515
FM Educational	302	291
TV Commercial	735	613
TV Educational	144	108
TV translators	2177	1984

UNITED NATIONS

UNITED NATIONS RADIO

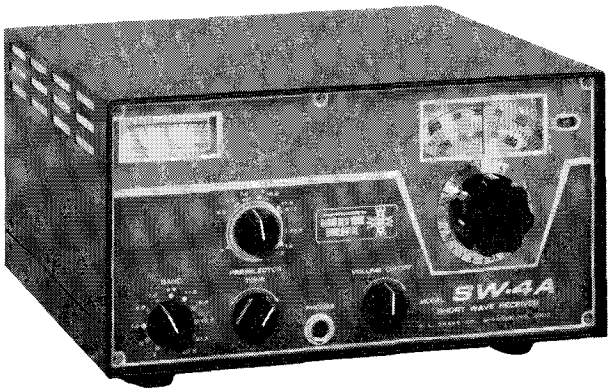
ADDR: United Nations, New York. Cable: Unations, New York. Te: Plaza 4-1234. Telex 222422 – **L.P:** Officer-in-Charge, Office of Public Information: J. Rolz-Bennett. R & Visual Services Div: Dir: J. d'Arcy. Deputy Dir: D. Ritchie. Chief of Operations & TV: M. Hayward. Chief of Radio: P. Jankowski. Mgr. Technical Operations: J. C. Nichols.
INT-SIG: Music Chime.



ANN: "This is the "United Nations". This introductory phrase is used in all official UN prgrs. in all of the languages concerned Message to listeners: The R. & Visual services Division is anxious to establish contact with as many listeners as possible and will gladly acknowledge all communications. Upon request, new correspondents are sent a prgr. sched. and some general information about the United Nations and the Specialized Agencies. Correspondence and requests for copies of the schedule of UN broadcasts should be addressed to the Director of the nearest UN Information Centre. These are located in Accra, Addis Ababa, Algiers, Asuncion, Athens, Baghdad, Bangkok, Beirut,

DRAKE SW-4A International Short-Wave Broadcast RECEIVER

DIRECT FREQUENCY DIALING:



No more guesswork in identifying stations. Set dial at a station's frequency and if conditions permit you'll hear it everytime...

FREQUENCY COVERAGE — .15—.5, .5—1.0, 1.0—1.5, 6.0—6.5, 7.0—7.5, 9.5—10.0, 11.5—12.0, 15.0—15.5, 17.5—18.0, 21.5—22.0, and 25.5—26.0 megacycles with crystals supplied. These frequencies cover European LF, American MF and International SW Broadcast Bands.

SELECTIVITY — 5 KC at 6 DB down and 16 KC at 60 DB.

I. F. FREQUENCIES — First I.F.—5645 KC crystal lattice filter, second I.F. —455 KC.

STABILITY — Less than 100 cycles after warm-up. Less than 100 cycles for 10% line voltage change.

SENSITIVITY — AM signal-to-noise ratio of 10 DB with less than 2 uv input signal modulated 30%.

MODE OF OPERATION — AM

DIAL CALIBRATION — Main dial (window) calibrated 0—.500 MC and .500 to 1.000 MC in 5 KC divisions. Vernier dial calibrated 0 to 25 KC in 1 KC divisions.

CALIBRATION ACCURACY — ±2 KC if dial is set to known frequency within the band.

AGC — Amplified delayed. 3 DB change in AF output with 60 DB change in RF input.

AUDIO OUTPUT — 2 watts at 5% H.D., 3 watts maximum.

AUDIO OUTPUT IMPEDANCE — 4 ohms and 8 ohms

ANTENNA INPUT — 52 ohms nominal

FRONT PANEL CONTROLS — Band Switch, Preselector, Tone, Volume/On-Off, Headphone Jack, and Main Tuning.

REAR CONTROLS & CONNECTIONS — S-Meter Zero, 120/240 Volt Switch, Speaker Connections, and Antenna Connections.

POWER CONSUMPTION — 30 Watts, 120/240 VAC, 50/60 Cycles.

DIMENSIONS — 5½" high, 10¾" wide, cabinet depth 11⅝", overall depth 12¼", weight 16 lbs.

ACCESSORIES — Models MS-4 Matching Speaker **and AL-4** Shielded Directional Loop Antenna for .5—1.5 MC.

FEATURES:

- Ultra-precision tuning dial accuracy
- Also accurately tunes standard AM Broadcast
- Crystal lattice filter for adjacent station rejection and good audio frequency response
- Dual conversion
- Solid state AF output gives low distortion and good frequency response
- S-meter for signal strength indication
- Preselector gives superior sensitivity by peaking antenna and RF stages
- Crystal-controlled H. F. Oscillator for same exceptional stability on all ranges
- Amplified AVC—gives constant AF output for all signal strengths

TUBES AND SEMI-CONDUCTORS

12BZ6	RF Amp	2N3394	AGC Amp
6HS6	1st Mixer	2—2N3394	AF Amp
6HS6	Premixer	40310	AF Output
12BE6	2nd Mixer	2—1N3194	Power Supply Rectifiers
12BA6	1st I.F. Amp	1N3194	Bias Rectifier
12BA6	2nd I.F. Amp	1N714	Voltage Reg
2N3858	VFO	1N270	Detector
2N3858	VFO Buffer	2N3394	Detector
2N3394	Xtal Oscillator		

Designed and priced for the Short Wave Listener, the SW-4A was derived from our top line communications receiver, Model R4-A, for the express purpose of providing dependable reception of international short wave broadcasts. The more versatile Model R-4A, has most of the SW-4A features plus many extra functions needed in communications. Both models are available from your dealer. Write for free brochure:

R. L. DRAKE COMPANY • **540 Richard St., Miamisburg, Ohio 45342**

Belgrade, Bogota, Buenos Aires, Bujumbura, Cairo, Colombo, Copenhagen, Dakar, Dar Es Salaam, Djakarta, Geneva, Kabul, Karachi, Kathmandu, Khartoum, La Paz, Leopoldville, Lima, Lome, London, Manila, Mexico City, Monrovia, Moscow, New Delhi, Paris, Port Moresby, Port-of-Spain, Prague, Rabat, Rangoon, Rio de Janeiro, Rome, San Salvador, Santiago, Sydney, Tananarive, Teheran, Tokyo, Tunis, Washington.
Request for copies of the sched. of UN broadc, which can be heard in the United States should be addressed to: Radio and Visual Services Divisions, United Nations, New York.

BROADCASTS FROM THE UNITED NATIONS
G=Greenville; T=Tangier; B=Bethany; BB=Boundbrook; D=Delano; DI=Dixon; M=Monrovia; P=Philippines; H=Honolulu. I=We & Ce. Europe; II=So. Europe; III=We & Ce. Africa; IV=Ea. Latin America; V=Brazil; VI=We. Latin America; VII=Ce & So. Africa; VIII=M. East/No. Africa; IX=We. Africa; X=Ea. Africa; XI=Malaysia/Singapore; XII=Australia/N.Z.; XIII=So.Ea. Asia. *=Mon–Fri. **=Tues–Sat.

Times	Area	kc/tr	L
*18.00–18.30	I/II	11880/15415/21640(G)	a
		11735(T)	a
*18.30–18.45	III	11880/15415/21640(G)	b
*18.45–19.00	VIII	9615(T), 11880/15415(G)	Arabic
**00.30–01.00	IV/VI	9640/11940(G), 15160(B)	Spanish
**01.00–01.15	V	11830/15250/17805(G)	Portuguese
**02.30–02.45	XI	15210/17750(P)[1]	English
**05.30–06.00	VII	6125/9565(G)	c
**06.15–06.30	IX	6125/9565(G)	d
**06.30–07.00	II/VIII	7270/9615/15315(T)[2]	e
**07.45–08.00	X	15315/17780(M)[3]	English
**08.45–09.00	XII	5985/9665(DI), 15120(H)	English
**10.00–10.30	XIII	15395/17820(P)[4]	f
**10.30–10.45	XIII	15410(P)[4]	Chinese
**10.45–11.00	XIII	15410(P)[4]	English

a) N. in English 18.00, French 18.05, Spanish 18.10, Greek 18.15, Turkish 18.20, German 18.25 – b) N. in English 18.30, French 18.35, Spanish 18.40, c) N. in French 05.30, English 05.45 – d) N. in French 06.15, English 06.22 – e) N. in English 06.30, Hebrew 06.35, French 06.40, Italian 06.45, Serbo-Croat 06.50 – f) N. in English 10.00, Tagalog 10.10, Thai 10.20 – [1]) broadc. to (P) on 17850kc(D), 21630kc(DI) – [2]) broadc. to (T) at 03.30–04.00 on 6055/9770kc(G) – [3]) broadc. to (M) at 06.00–06.15 on 6125/9565(G) – [4]) broadc. to (P) at 06.30–07.30 on 11830/15395kc(DI).

BROADCAST OF MEETINGS OF THE GENERAL ASSEMBLY AND THE SECURITY COUNCIL WHEN IN SESSION
AM Meeting:
14.30–17.00 English/French[5]) on G 15410kc(67°)/21640kc(94°)
14.30–17.00 Spanish[6]) on B 15385kc(168°)/17750kc(168°).
PM Meeting:
19.00–02.00 English/French[5]) on G 11880kc(45°)/15130kc(94°)
19.00–22.45 Spanish[6]) on B 17750kc(168°)
19.00–02.00 Spanish[6]) on B 15385kc(168°)
[5]) to Europe/We & Ce. Africa; [6]) to Latin America.
Prgr's from the United Nations are broadcast by st's in more than 100 countries and territories. The times of these broadcasts may be ascertained from local newspaper or from the stations concerned – R. st's in the US and Canada receive the prgr's direct by line from the Nations Headquarters or by recording – The R. and Visual Services Division prepares and distributes recorded prgr's in Amharic, Arabic, Duri, Dutch, English, French, German, Greek, Hebrew, Hindi, Indonesian, Italian, Persian, Polish, Portuguese, Pushtu, Russian, Serbo-Croat, Sinhalese, Spanish, Swahili, Tagalog, Thai, Turkish and Urdu.
Letters from Listeners are welcome.
New listeners are sent some general information about the United Nations upon request – Correspondence and request for particulars of the United Nations broadcasts from Headquarters should be addressed to: Radio and Visual Services Division, United Nations, New York.

CENTRAL AMERICA

BAHAMAS (British)

L.T: GMT – 5h – Pr.L: English.
BAHAMAS BROADCASTING AND TELEVISION COMMISSION (Gov, Comm.)
ADDR: P.O. Box 1347, Nassau. Te: 2-4623. Cable: "Broadcasts" – L.P: Mgr: R. Bethel. Dir. Tec: L. Cartwright.
STATIONS (System: Gates (ZNS1)):
ZNS1 1540kc 195m 10kW – ZNS2 1240kc 242m 0.25kW.
HOME SCE. on 1540kc: 11.00 (Sun 12.00)–05.00. N: 13.15, 18.15, 00.15 – On 1240kc: 22.30–04.00. N: 01.00.
ANN: "This is st. ZNS, Nassau". "This is ZNS2, The Voice of New Providence" – V. by letter. Recordings accepted.

BARBADOS

L.T: GMT –4 h – Pr.L: English.
CARIBBEAN BROADCASTING CORPO. (Gov, Comm.).
ADDR: P.O. Box 780, Barbados. Te: 92041. Cable: Cabroco – L.P: St.Mgr: A.N. Forde, Dir. Tec: G. Shaw.
STATION (System: Marconi): 785kc 10kW.
HOME SCE. in English: 09.58–03.15(Sat 04.05) – N: 10.50, 11.00*, 12.00. 13.00*, 14.00, 15.00, 16.00*, 17.00*, 18.00, 19.00, 20.00*, 21.00*, 22.00, 23.00*, 00.00, 01.00, 03.00* – *=BBC.
ANN: "This is R. Barbados – 785 on your dial" – V. by letter. Rp. Recorded or written re. in E – AD: 12 min's per h.

BARBADOS REDIFFUSION SERVICE LTD. (Public Co.).
ADDR: River Rd, Bridgetown. Te: 0811. Cable: Rediffusion – L.P: Gen. Mgr: Col. R. W. R. Oliver. Eng: G. Duesbury. Dir. Prgr: F. C. Pardo – D.PRGR: 09.58–03.03 – N (BBC): 11.00, 16.00, 21.00, 23.00, 03.00.

COSTA RICA

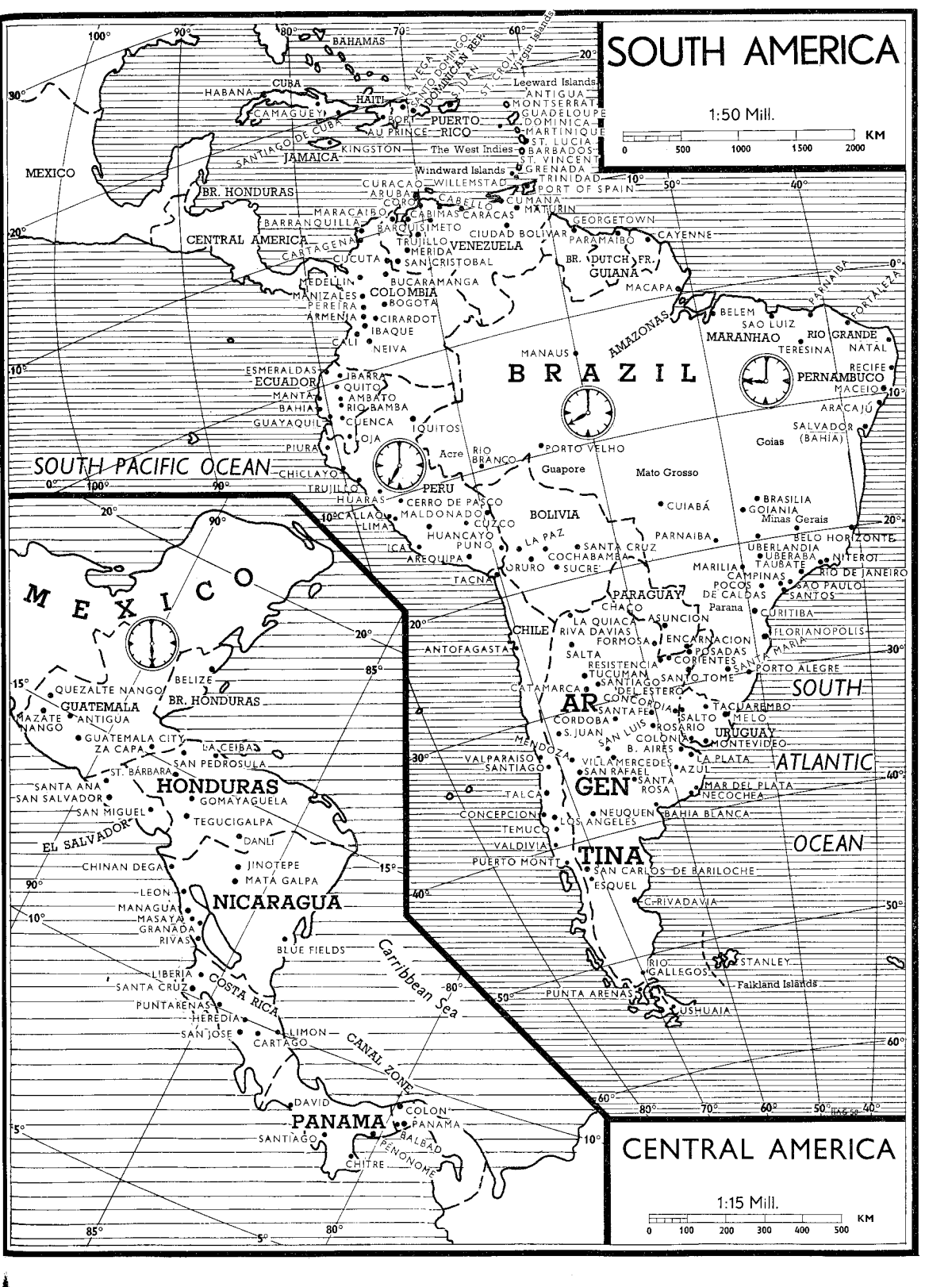
L.T: GMT – 6h – Pr.L: Spanish.
DEPARTAMENTO CONTROL NACIONAL DE RADIO
ADDR: Apt. 3483, San José. Cable: Ranac. Te: 7339 – L.P: Dir: L. H. Andrés.
EMPRESARIOS RADIODIFUSORES ASOCIADOS (ERA)
ADDR: Apt. Postal 111, San José – L.P: Pres: R. Barahona Gomez.
STATIONS: All st's comm. exc. 2), 23) (Rlg), 18), (39) (Cultural).
Short Waves: Call: TI—. 1) Ea & We; 2) No & So.

Call	kc	m	kw	Name	h of tr
1) Q	5954	50.39	1	R. Casino, P. Limon	11.55–06.00
2) FC	6037	49.69	2d[1]	Faro del Caribe, San José	12.00–19.00
					23.15–04.00
3) JCV	6150	48.78	1	R. Guapiles	
4) JCD	6205	48.35	1	R. Atenas, San José	24h
5)HGB	6207	48.33	1	R. Reloj, San José	24h
6) RHB2	6215	48.27	1	R. Popular, San José	12.00–05.00
7) RICA	9615	31.20	3	La Voz de la Victor San José	11.00–05.00
2) FC	9645	31.10	2d[2]	Faro del Caribe, San José	12.00–19.00
					23.15–04.00

Medium Waves: Call: TI—. °) also Short Wave.

Call	kc	kw	Call	kc	kw	Call	kc	kw
8) JJH	550	1.5	20) CM	925	1	29) RE	1275	1
9) WA	575	1	21) EGO	950	1	30) SBJ	1300	2
10) AV	600	1	4) RS	°975	4	31) RG	1325	1
7) RICA	°625	50	22) GPH	1000	1	32) JRA	1350	1
11) BAS	650	1	23) AC	1025	2	33) MAR	1375	1
12) JC	675	1	24) GPH	1050	1	34) LG	1400	1
5) HB	°700	2	2) FC	°1075	10	35) CJ	1425	1
13) LX	725	1	25) RN	1100	1	36) MMC	1450	1
14) RA	750	1	4) SRHB	°1125	1	37) DVC	1475	1
15) W	775	4.5	26) GPH3	1150	1	38) L3	1500	1
16) GPH2	800	3.5	13) CA	1175	2	39) EEAW	1525	1
17) OS	825	1.5	1) Q	°1200	1	40) MET	1550	2
18) UCR	850	10	27) GM	1225	1	41) JJG	1575	1
11) GPH	875	1	28) LM	1250	1	42) ACA	1600	1
19) CS	900	6						

Short Waves:
1) Apt. 287, Puerto Limon. L.P: Dir: L. Villalobos. V. by letter.
2) Apt. 2710, San José. Te: 1250. L.P: Mgr: F. Cabezas B. Dir. Tec: W. Griffin. Dir. Prgr: P. Delgado. D.Prgr: 12.00–19.00, 23.15–04.00. English Hour: 03.00–04.00, "Lumbrera a mi Camino" (Spanish Christian prgr's): 15.00–16.00. Ann: "This is TIFC, the Lighthouse of the Caribbean in San José, Costa Rica". Sp: "TIFC, Faro del Caribe en San José, Costa Rica". V. by QSL-card. Pub: Prgr. sched. free on request.
3) Guápiles. L.P: Dir. P. Jesús C.
4) Apt. 208, San José. L.P: J. Vega.
5) Apt. 341, San José. L.P: R. Barahona G. V. by letter. St's 5), 6) R. Exitos FM (90Mc) form the network Sistema Radiofonico HB.
6) Apt. 341, San José. Te: 5607. L.P: Dir: R. Barahona, Secr: Miss M.C.A.Barahona. D.Prgr: N. every h on the h. Ann: "Esta es R. Popular de Costa Rica". V. by QSL-card or letter. Re. in Sp, E.
7) Apt. 1079, San José. Te: 213737. Cable: Voz Victor. L.P: Dir. Gen: S. March Palau. D.Prgr: N: every half h and 12.00, 17.00, 21.00, 03.00. Ann: "Estan Uds. escuchando la R. Internacional La Voz de Victor en 625kc onda larga y 9615kc onda corta". FM: 102.1Mc. V. by QSL-card. Recordings accepted.


SOUTH AMERICA
1:50 Mill.
KM
0 500 1000 1500 2000
CENTRAL AMERICA
1:15 Mill.
KM
0 100 200 300 400 500
BRAZIL
MEXICO
SOUTH PACIFIC OCEAN
SOUTH ATLANTIC OCEAN
Caribbean Sea
BAHAMAS
CUBA
HABANA
CAMAGUEY
HAITI
PORT AU PRINCE
PUERTO RICO
JAMAICA
KINGSTON
The West Indies
Leeward Islands
ANTIGUA
MONTSERRAT
GUADELOUPE
DOMINICA
MARTINIQUE
ST. LUCIA
BARBADOS
ST. VINCENT
GRENADA
TRINIDAD
PORT OF SPAIN
Windward Islands
CURACAO
WILLEMSTAD
ARUBA
CABELLO
CORO
CUMANA
MATURIN
MARACAIBO
BARQUISIMETO
CABIMAS
CARACAS
CIUDAD BOLIVAR
GEORGETOWN
PARAMAIBO
CAYENNE
BR. HONDURAS
CENTRAL AMERICA
CARTAGENA
TRUJILLO
MERIDA
VENEZUELA
CUCUTA
SAN CRISTOBAL
BR. DUTCH FR. GUIANA
MACAPA
MEDELLIN
BUCARAMANGA
COLOMBIA
MANIZALES
PEREIRA
BOGOTA
ARMENIA
CIRARDOT
IBAQUE
CALI
NEIVA
BELEM
SAO LUIZ
MARANHAO
RIO GRANDE
NATAL
TERESINA
PARNAIBA
FORTALEZA
AMAZONAS
MANAUS
ESMERALDAS
IBARRA
ECUADOR
QUITO
MANTA
AMBATO
BAHIA
RIO BAMBA
GUAYAQUIL
CUENCA
LOJA
IQUITOS
PIURA
CHICLAYO
TRUJILLO
HUARAS
PERU
CERRO DE PASCO
CALLAO
LIMA
MALDONADO
CUZCO
HUANCAYO
ICA
PUNO
AREQUIPA
TACNA
Acre
RIO BRANCO
PORTO VELHO
Guapore
Mato Grosso
BOLIVIA
CUIABÁ
BRASILIA
GOIANIA
Minas Gerais
PARNAIBA
BELO HORIZONTE
UBERLANDIA
UBERABA
NITEROI
TAUBATE
MARILIA
CAMPINAS
RIO DE JANEIRO
POCOS DE CALDAS
SAO PAULO
SANTOS
SALVADOR (BAHIA)
Goias
ARACAJÚ
RECIFE
PERNAMBUCO
MACEIO
LA PAZ
SANTA CRUZ
COCHABAMBA
ORURO
SUCRE
PARAGUAY
CHACO
ASUNCION
Parana
CURITIBA
FLORIANOPOLIS
PORTO ALEGRE
CHILE
ANTOFAGASTA
RIVA DAVIAS
LA QUIACA
FORMOSA
ENCARNACION
POSADAS
CORIENTES
SALTA
RESISTENCIA
TUCUMAN
SANTIAGO DEL ESTERO
SANTO TOME
CATAMARCA
CONCORDIA
SANTA FE
TACUAREMBO
CORDOBA
SALTO
MELO
S. JUAN
SAN LUIS
ROSARIO
URUGUAY
COLONIA
MONTEVIDEO
MENDOZA
B. AIRES
VALPARAISO
SANTIAGO
VILA MERCEDES
LA PLATA
SAN RAFAEL
AZUL
SANTA ROSA
MAR DEL PLATA
NECOCHEA
TALCA
CONCEPCION
LOS ANGELES
NEUQUEN
BAHIA BLANCA
TEMUCO
VALDIVIA
PUERTO MONTT
SAN CARLOS DE BARILOCHE
ESQUEL
C. RIVADAVIA
RIO GALLEGOS
STANLEY
Falkland Islands
PUNTA ARENAS
USHUAIA
MEXICO
QUEZALTE NANGO
BELIZE
BR. HONDURAS
GUATEMALA
ANTIGUA
MAZATE NANGO
GUATEMALA CITY
ZA CAPA
LA CEIBA
SAN PEDROSULA
ST. BÁRBARA
HONDURAS
SANTA ANA
SAN SALVADOR
GOMAYAGUELA
SAN MIGUEL
TEGUCIGALPA
EL SALVADOR
DANLI
CHINAN DEGA
JINOTEPE
MATA GALPA
NICARAGUA
LEON
MANAGUA
MASAYA
GRANADA
RIVAS
BLUE FIELDS
LIBERIA
SANTA CRUZ
COSTA RICA
PUNTARENAS
HEREDIA
SAN JOSE
LIMON
CARTAGO
CANAL ZONE
DAVID
COLON
PANAMA
PANAMA
SANTIAGO
BALBAO
PENONOME
CHITRE

Medium Waves:
8) **R. Progreso**, Apt. 122, Alajuela. **L.P:** Dir: E. Martinez.
9) **Radiopolis**, Apt. 854, San José. **L.P:** J. Casto C.
10) **R. TicTac**, San José. **L.P:** A. Vargas.
11) **R. Monumental**, Apt. 800, San José. **L.P:** Dir: L. Pinto S.
12) **R. Musical**, Apt. 854, San José. **L.P:** J. Castro C.
13) **R. Columbia**, Apt. 708, San José(TICA: Apt. 708, Puntarenas). **L.P:** C. Alfaro.
14) **Radiolandia**, Apt. 2525, San José. **L.P:** Dir: R. Aguilar V.
15) **R. City**, Apt. 835, San José. **L.P:** Dir: A. Múrolo C. **V.** by letter.
16) **R. Centro**, San José. **L.P:** L. Pinto S.
17) **R. Titania**, Apt. 512, San José. **L.P:** M. Sotela P.
18) **R. Universitaria**, San Pedro. **L.P:** Dir: C. Salazar H. **D.Prgr:** 14.00–04.00 (Classical music only). **V.** by letter.
19) **La Voz de America**, Apt. 517, San José. **L.P:** A. F. Cañas.
20) **Cadena Musical**, Apt. 854, San José. **L.P:** J. Castro C.
21) **R. Eco**, Tibás S. J. **L.P:** J. F. Lafuente.
22) **R. Monumental**, Pto. Limon. **L.P:** Dir: L. Pintos.
23) **R. Fides**, Apt. 1933, San José. **L.P:** Dir: P. A. Troyo. **D.Prgr:** 11.00–04.15. **N:** 17.00. **Ann:** "TIAC, R. Fides, Emisora Católica de la Iglesia de Costa Rica".
24) **R. Monumental**, Puntarenas. (Apt. 800, San José).
25) **R. Columbia**, Apt. 708, San José. **L.P:** C. Alfaro.
26) **Monumental Canal Dos**, Ci. Quesada (see 11).
27) **R. Victoria**, Cartago. **L.P:** Dir: R. Castro.
28) **Columbia Canal 4**, Nicoya. **L.P:** C. Alfaro.
29) **R. Emmaus**, San Vito. **L.P:** Dir. Gen: C. H. Rodriquez Q. **D.Prgr:** 11.50–03.15.
30) **R. Libertad**, Apt. 4075, San José. **L.P:** S. Berúdez – 31) **R. Columbia**, Liberia. **L.P:** H. Reuben A – 32) **R. Sideral**, San Rámon. **L.P:** Dir: O. Acosta C – 33) **R. Satelite**, San Isidro. **L.P:** V. M. Viquez – 34) **R. Cariari**, Limón. **L.P:** Dir: L. Grau V.
35) **R. Sinai**, San Isidro del General. **L.P:** Dir: P. A. Coto.
36) **R. Golfito**, Puerto Golfito. **L.P:** Dir: M. A. Muñuz. **V.** by letter.
37) **San Carlos**, Apt. 46, Quesada, San Carlos. **L.P:** Dir: M. Valle.
38) **R. Hispania**, Cartago. **L.P:** Dir: C. Alfaro – 39) **R. Turrialba**, Turrialba. **L.P:** H. Saborio B – 40) **R. Meterológico**, Minst. Agricultura, San José.
41) **R. Lyra**, Palmares. **L.P:** Dir: A. Céspedes A.
42) **La Voz de Costa Rica**, San José. **L.P:** Dir: A. Cespedes A.

CUBA

L.T: GMT−5 h – **Pr.L:** Spanish.

MINISTERIO DE COMUNICACIONES

Direccion General de Telecomunicaciones.
ADDR: Plaza de la Revolúción "José Marti", La Habana.

INSTITUTO CUBANO DE RADIODIFUSION

Edif. Radiocentro, Ly 23, Vedado, Habana.

RADIO HABANA CUBA

ADDR: Apt. Postal 7026, Habana – **L.P:** Dir. Foreign Relations Department: María Montero Triana.

STATIONS (G.C: 82.30W/23.00N): 5×100kW, 9×240kW tr's

kc	m	kc	m	kc	m	kc	m
6015	49.88	9550	31.41	11930	25.15	15300	19.61
6060	49.50	9655	31.07	15185	19.76	15340	19.56
6135	48.90	9685	30.98	15230	19.70	17715	16.93
6170	48.62	11760	25.51	15270	19.65	17855	16.80

FOREIGN SERVICE
I=No. Europe; II=America; III=So. America; IV=Mediterranean; V=Europe; VI=Caribbean; VII=Africa.

Arabic	Area	kc	French	Area	kc
08.00–08.30	IV	6015, 9685	19.00–20.10	I	6015
10.00–10.30	IV	6015, 9685	19.00–20.00	VII	15340
18.10–18.55	IV	11930, 15185	03.00–03.30	II	6135
20.30–21.10	IV	11930, 15185	**Guarani**		
Creole			22.30–23.00	III	11930
11.00–12.00	VI	6060	**Quechua**		
02.00–03.00	VI	6060	01.00–01.30*	III	15230
English			**Portuguese**		
20.10–21.40	I	6015	09.00–10.00	III	9655
20.50–21.50	III	15270, 15300	20.00–21.00	VII	15340
01.00–06.00	III	11760	02.00–03.00	III	11930
01.00–06.00	II	6170	**Spanish**		
03.30–06.00	II	6135	06.30–07.30	IV	6015, 9685
06.30–08.00	II	9655	08.30–09.30	IV	6015, 9685
18.00–19.00	VII	15340	10.30–10.45	IV	6015, 9685
French			17.00–18.00	VII	15340
07.30–08.00	IV	6015, 9685	18.55–20.30	IV	11930, 15185
09.30–10.00	IV	6015, 9685	21.00–21.40	IV	15340
17.00–18.10	IV	11930, 15185			
21.10–21.40	IV	11930, 15185			

*=Sun only.

Spanish to the Americas
11.00–16.45 on 6135, 9655, 15270, 15300, 17715, 17855kc, 16.45–18.30 on 6135, 15270, 15300kc, 18.30–20.50 on 15270, 15300kc, 22.00–22.30 on 6060, 6135, 9550, 9655, 11930, 15230, 15340kc, 22.30–23.00 on 6060, 6135, 9550, 9655, 15230, 15340kc, 23.00–02.00 on 6060, 6135, 9550, 9655, 11930, 15230, 15340kc, 02.00–03.00 on 6135, 9550, 15230, 15340kc, 03.00–06.00 on 6060, 9550, 11930, 15230, 15340kc.
ANN: Sp: "Esta es R. Habana Cuba, transmitiendo desde Cuba, Território libre de América" – **V.** by QSL-card and letter.

Medium Waves: Call: CM--.

Call	kc	kW	Location	Call	kc	kW	Location
1) I	570	10	Sta. Clara	9) JY	860	1	C. de Avila
1) W	590	25/15	La Habana	10) BL	860	15/1	La Habana
1) –	600	1	Trinidad	11) AG	880	1	Consolacion
1) KV	600	2	Holguin				
2) HQ	630	50	Sta. Clara	11) JB	880	1	Camagüey
2) KU	630	2	Santiago	11) HD	880	1	Sta. Clara
2) Q	640	50	La Habana	2) JV	900	1	C. de Avila
3) HG	660	1	Sta. Clara	11) BF	910	10	La Habana
3) KP	670	1	Holguin	11) GX	910	1	Matanzas
3) AF	680	1/0.5	P. del Rio	11) –	920	1	Placetas
3) HN	680	1/0.5	Cienfuegos	1) KN	930	1	Santiago
3) DB	680	1/0.5	Santiago	1) JN	960	1	Camagüey
3) BC	690	50	La Habana	12) CK	980	5	La Habana
3) JT	700	1/0.5	C. de Avila	13) HT	990	1/0.25	S. Spiritus
1) –	720	30	Colón	9) FA	1000	1	Camagüey
2) KJ	730	10	Holguin	11) KM	1010	5	Holguin
2) AQ	740	1	P. del Rio	14) BQ	1060	5/1	La Habana
2) JL	740	10	Camagüey	15) DL	1120	1/0.25	Holguin
4) CD	760	10	La Habana	16) HA	1130	1	Sta. Clara
5) DC	770	1	Holguin	4) HK	1210	1	Cruces
1) HB	780	1	S. Spiritus	4) CI	1260	5	La Habana
6) CH	790	10	La Habana	4) JC	1270	1	Camagüey
4) KL	800	2	Santiago	4) HM	1280	1	Sta. Clara
3) JE	810	1	Camagüey	17) JQ	1300	1	Nuevitas
7) CA	830	10	La Habana	18) KT	1520	1/0.25	V. de las Tunas
8) HW	840	1/0.5	Sta. Clara				
5) KC	850	2	Santiago	4) JS	1600	1	C. de Avila

+ 40 sts. less 1kW not mentioned.

1) **R. Rebelde**, La Habana.
2) **Circuito CMQ**, Radiocentro L y 23, Vedado, La Habana. **D.Prgr:** 10.30–05.00. **N:** on the h. **Ann:** "CMQ, desde La Habana, Cuba, território libre de América".
3) **R. Progreso**, Av. Menocal 105, La Habana. **D.Prgr:** 10.30–05.00. **Ann:** "R. Progreso, Cadena Nacional, La Onda de la Alegria". **Special Prgr. in English:** 05.00–06.00(Mon only) for No. American Negroes. **Ann:** "This is R. Free Dixie, broadc. from Havana, Cuba, Free Territory of America".
4) **R. Reloj Nacional**, Ed. Odontológico 1211, Vedado, Habana. **D.Prgr:** 24 h; Continuous prgr. of N & Comm. under rhytm of clock ticks every second; Time checks every min.
5) **R. Cadena CMCK**, Aquilera 511, Santiago. **D.Prgr:** 10.30–24.00.
6) **R. Cadena Habana**, San José 104, La Habana.
7) **R. CMCA**, P. de Marti 107, La Habana. **D.Prgr. in English** 11.00–06.00 exc. for bilingual newscasts. **Ann:** "CMCA, the Friendly Voice of Cuba, broadc. on 830kc, from Havana, Cuba, Free Territory of America".
8) **R. CHMW**, Parque Vidal, Sta. Clara. **D.Prgr:** 10.30–05.00.
9) **R. Cadena Agramonte**, Ciego de Avila. **D.Prgr:** 10.30–05.30.
10) **R. CMBL**, 25 No. 1111-1113, Vedado, La Habana. **Ann:** "Transmite CMBL, del Instituto Cubano de Radiodifusion, presentando musica para todo el mundo" – 11) **R. Musical Nacional**, La Habana. **D.Prgr:** 12.00–05.00 (Continuous music).
12) **El Periodico del Aire**, Av. de la Independencia, La Habana.
13) **R. Sancti Spiritus**, L. Caballero 4N, Sancti Spiritus.
14) **R. Enciclopedia Popular**, La Habana – 15) **La Voz de la Libertad**, Frexes 74, Holguin – 16) **Onda Musical**, Santa Clara – 17) **R. Nuevitas**, Ca. Garcia, Nuevitas – 18) **La Voz de Tunas**, V. Garcia 314, Victoria de las Tunas.

DOMINICAN REPUBLIC

L.T: GMT−5 h (GMT−4 h during a short "winter" period) – **Pr.L:** Spanish.

DIRECCION GENERAL DE TELECOMUNICACIONES

ADDR: Santo Domingo. **Te:** 22244. **Cable:** Telecom – **L.P:** Dir. Gen: L. M. Cepeda.
STATIONS: In Santo Domingo approx. 11.00–05.00; other cities 11.00–03.00 (exc. where indicated). All comm.

Short Waves: Call: HI--. *=inactive. P=Puerto. Sto.=Santo.

Call	kc	m	kW	Name and h of tr.
1) AU	3205	93.60	0.5	La Voz de la Libertad. P. Plata: 14.00–19.00
2) DB	*3235	92.74	0.5	R. Libertad, Santiago
3) AP	3245	92.45	0.5	R. Monte Cristi: 12.00–04.00

Call	kc	m	kW	Name and h of tr.
4) RM	3265	91.87	1	R. Sol, Higuey: 11.00–03.00
5) AA	*3315	90.50	1	R. Ritmos, Santiago: 11.30–03.00
6) AS	3345	89.68	1	Onda Musical, Sto. Domingo: irr.
7) BD	3355	89.42	0.25	La Voz de la Romana, Romana
8) RL	*3365	89.15	0.5	R. Exitos, Santiago
9) AD	3375	88.89	1	R. San Juan
10) DA	3385	88.63	1	R. Hit Musical, Santiago: W 11.00–04.00, Sun 12.55–01.00
11) AZ	3395	88.37	1	R. Santiago: irr.
6) AS	4770	62.89	1	Onda Musical, Sto. Domingo: irr.
12) F	*4840	61.98	1	La Voz del Atlantico, P. Plata
13) JP	4880	61.48	1	R. Comercial, Sto. Domingo: 11.00–05.00
14) N	4910	61.10	1	R. HIN, Sto. Domingo: 11.00–04.00
15) BE	4940	60.73	1	R. Mil, Sto. Domingo: 11.00–05.00
16) CN	4960	60.48	1	R. Antillas, Sto. Domingo: 11.00–05.00
17) CK	4980	60.25	0.25	Ondas del Yaque, Santiago: 10.00–04.00
18) BB	5030	59.64	1	La Voz del Papagayo, La Romana
19) L	*5055	59.36	0.5	La Voz del Tropico, Sto. Domingo
11) AZ	6060	49.50	1	R. Santiago: 11.00–21.00
2) DB	6075	49.38	0.5	R. Libertad, Santiago: 11.00–01.00
20) SD	6090	49.26	7.5	R. Televisión Dominicana: 11.00–05.00
21) Z	6110	49.10	1	Broadc. Nacional, Sto. Domingo: 11.00–05.00
22) CB	*6120	49.02	0.5	La Voz de la Hispañola, Santiago
23) G	*6130	48.94	0.25	R.Dif. HIG, Sto. Domingo
1) AU	6190	48.47	0.1	La Voz de la Libertad, P. Plata: 11.00–13.00, 19.00–03.00
20) SD	9505	31.56	50	R. Televisión Dominicana: 11.00–05.00
23) G	*9590	31.28	0.25	R.Dif. HIG, Sto. Domingo

Medium Waves: Call: HI--. °=Short Wave.

Call	kc	kW	Call	kc	kW	Call	kc	kW
24) BG	550	1	38) DL	1000	0.5	21) Z	°1350	1
25) MS	570	1	13) JP	°1020	5	20) SD	°1360	1
26) AB	590	0.5	22) CB	°1050	1	20) SD	°1370	1
20) SD	°620	10	39) MC	1100	0.5	50) CM	1380	5/1
3) AF	°630	1	16) CN	°1120	1	20) SD	°1400	1
27) AT	°650	5	8) RL	°1130	1	51) AL	1400	0.25
28) AM	660	2	6) AS	°1150	1	52) AE	1420	1
29) AW	690	5	15) BE	°1190	1	53) AK	1440	0.25
30) DC	700	1	40) DV	1200	0.5	9) AD	°1440	1
31) AQ	725	3	14) N	°1220	1	54) RD	1445	1
21) Z	°740	1	41) CJ	1220	0.5	55) AC	1450	0.25
32) MD	760	0.5	1) AU	°1240	0.25	56) BO	1450	0.5/0.25
19) L	°790	5	42) CV	1240	0.5	57) BN	1450	1
11) AZ	°820	5	43) BC	1250	1	58) AN	1460	0.5
20) SD	°860	5	44) T	1260	0.25	59) AG	1470	0.5
33) OR	880	0.25	20) SD	°1270	1	60) AP	1500	0.25
34) PJ	890	1	45) VM	1290	1	61) JP	1490	1
35) BA	910	0.5	46) KQ	1300	1	62) BL	1510	1
17) CK	°920	2	47) AV	1310	0.5	63) BL	1520	1
36) BM	925	0.2	20) SD	°1310	1	64) AJ	1560	1
23) G	°950	0.25	48) HD	1320	1	65) BI	1585	1/0.25
12) F	°960	5	2) DB	°1330	1	66) BS	1600	1
37) SA	980	3	49) BZ	1340	1	10) DA	°1600	1

Abbrev: R.D.=República Dominicana.

Short Waves:

1) Apt. 244, P. Plata. **Te:** 570. **L.P:** Dir: J. Rojas. Dir. Tec: L. José E. **D.Prgr:** N: D 11.00. **FM:** 98.2Mc (SW: Also reported on 3225 & 6185kc). **Ann:** "Transmite la Voz de la Libertad desde Puerto Plata norte de la República Dominicana". V. by letter. Recordings accepted.

2) Máximo Gomez 14, Santiago. **Te:** 2924. **L.P:** Dir: A. Vanderhorst. **Ann:** "Desde Santiago, en la R. D. transmite R. Libertad, Sintoniá perfecta en todo el pais".

3) Apt. 52, Monte Cristi. **Te:** 161. **L.P:** Dir: R. O. Moscoso. **D.Prgr:** N: 17.00, 00.00. **FM:** 97Mc 0.25kW. V. by letter. Recordings accepted.

4) Apt. 1313, Higuey. **Te:** 43. **L.P:** R. A. Morales S. Dir. Tec: S. Martinez. **D.Prgr:** N: 11.00. **Ann:** "R. Sol, 3265kc Banda Tropical de 90m desde la Segunda Planta del Moderno y Lujo Hotel el Naranjo, en Higuey, R.D.". V. by letter. Recordings accepted.

5) Apt. 581, Santiago. **Te:** 2001. **L.P:** Dir: J. W. Streese. **FM:** 95Mc 0,25kW.

6) Palo Hincado 48, Sto. Domingo. **Te:** 2-6129. **L.P:** Dir: Torres Tejeda. **FM:** 92Mc 0.05kW. V. by letter.

7) Castillo Marquez 28, altos, La Romana. **Te:** 98. **L.P:** Dir: N. Martiñez. **Ann:** "Transmite HIBD, La Voz de La Romana, desde La Romana, R.D".

8) Ca. Las Carreras 34, Santiago. **Te:** 4318. **L.P:** Dir: D. de la Rosa. **FM:** 90Mc 50kW. V. by letter.

9) Capotillo 106, San Juan de la Maguana. **Te:** 99. **L.P:** Dir: Dr. O. Cucurullo R.

10) 30 de Marzo 35, Santiago. **Te:** 3246. **Cable:** Maja. **L.P:** Dir. Gen: M. A. Jorge A. Dir. Tec: F. Rafael B. **D.Prgr:** N: 11.00, 12.00, 12.15, 16.45, 19.00, 22.00, 23.15, 00.45, 02.45. **Ann:** "H-I-D-A, R. Hit Musical, Santiago de los Caballeros, R.D. con sus frequencias de 1600 y 3385kc respectivamente". V. by QSL-card. Recordings accepted.

11) Apt. 282, Santiago. **Te:** 5141. **L.P:** Dir: A. Bojos B. Dir. Tec: L. Felipe Moscoso. **D.Prgr:** 11.00–05.00. N: 17.35, 03.05. **FM:** 89.2Mc 500W. **Ann:** "Circuito de Emisoras de R. Santiago, ondas corta y larga, 89.2Mc, en Santiago, R.D". V. by QSL-card. Re. in Sp, E.

12) Ca. Comercio 21, P. Plata. **Te:** 567. **L.P:** Dir: D. Brugal Alfau.

13) Apt. 1322, Sto. Domingo. **Te:** 21144. **L.P:** Dir: L. Rafael D. **FM:** 95Mc 0.25kW. V. by QSL-card or letter.

14) Apt. 1220, Sto. Domingo. **Te:** 3-1015. **L.P:** Dir. Adm: H. Pérez Reyes. Dir. Tec: J. Salazar. **D.Prgr:** N: 11.00, 00.35. **Ann:** "Desde Sto. Domingo, Capital de la R.D. transmite R. HIN". **FM:** 91Mc. V. by letter. Re. in Sp, E.

15) Apt. 1372, Sto. Domingo. **L.P:** Dir: J. B. Jimenez M. **FM:** 103/127.4Mc (0.25kW/15W). **Ann:** "R. Mil, la Primera". V. by QSL-card.

16) Ca. Mercedes 102, Sto. Domingo. **Te:** 9-8719. **Cable:** Mazelba. **L.P:** Dir: A. Rodriguez. Dir. Tec: A. Infante. **D.Prgr:** N (W only): 11.30, 17.30, 23.00. **Ann:** "Esta es R. Antillas, con Estudios en el Corazon de Sto. Domingo, Capital de la R.D". V. by letter.

17) Ca. 30 de Marzo 15, Santiago. **Te:** 2144. **L.P:** Dir: R. de Luna. Dir. Tec: L. Silverio. **D.Prgr:** N: 11.00, 17.00, 23.00. **Ann:** "Transmite Ondas del Yaque, desde Santiago de los Caballeros en la R.D". V. by QSL-card. Recordings accepted.

18) Casa Puerto Rico, La Romana. **Te:** 135. **L.P:** Dir: M. Romero.

19) Apt. 335, Sto. Domingo. **Te:** 5-1484. **L.P:** Dir: V. Portalatin. Dir. Tec: W. Pons. **D.Prgr:** N: 11.00. **Ann:** "La Voz del Tropico HIL". V. by letter. Recordings accepted.

20) Ca. Dr. Tejada Florentino 8, Sto. Domingo. **Te:** 9-2120. **Cable:** Dominicana. **L.P:** Dir. Gen: Dr. L. Dhimes Pablo. **D.Prgr:** N: 11.00, 15.00, 19.00, 21.00, 03.30. **Ann:** "R. Televisión Dominicana, desde Sto. Domingo, Capital de la R.D". V. by QSL-card. **Relay st's:** 1270kc Santiago, 1360kc La Vega, 1310kc El Seibo, 1370kc Barahona, 1400kc San Juan de la Maguana. **FM:** 96Mc (Constanza) 0.25kW, 100Mc (Sto. Domingo) 0.25kW.

21) Edif. Copello, Apt. 201, Ca. El Conde, Esq. Sanchez, Sto. Domingo. **Te:** 9-6967. **L.P:** Dir: Ing. F. Hatton. **Ann:** "Transmiten las Emisoras Nacionales HIZ desde Sto. Domingo, Capital de la R.D". **FM:** 89.2Mc 0.06kW.

22) P.O. Box 454, Santiago de los Caballeros. **Te:** 2939. **L.P:** Dir: M. C. Valerio. V. by QSL-card.

23) Av. Mella 144, Sto. Domingo. **Te:** 2-2936. **L.P:** Dir: A. Cordero P. **FM:** 97Mc.

Medium Waves:

24) **Radiolandia**, Ca. el Sol 130, Peña. **L.P:** Dir: L. Pappaterra.

25) **R. Cristal**, El Conde 24, Sto. Domingo. **L.P:** Dir: M. Báez.

26) **R. Isabel Torres**, Ca. John F. Kennedy 115, P. Plata. **L.P:** Dir: Lic. J. Mendez.

27) **R. Universal**, Ca. J. Perdomo 34, Sto. Domingo. **L.P:** Dir: E. A. Perez.

28) **R. Quisqueyana**, Ca. 19 de Marzo 47, Santiago. **L.P:** Dir: M. Tulio C.

29) **R. Guarachita**, Palo Hincado 74, Sto. Domingo. **L.P:** Dir: R. A. Aracena.

30) **R. Mao**, 27 de Febrero 71, Valverde. **L.P:** Dir: T. Pujols S.

31) **R. Norte**, Ca. Pedro Fco. Bono 58, Santiago. **L.P:** Dir: R. Otilio H.

32) **R. Tamboril**, Peña. **L.P:** Dir: A. Dajer B.

33) **R. Santa Cruz**, Valverde – 34) **R. Continental**, Ca. T. A. G. Guerrero 77-A, Sto. Domingo. **L.P:** Dir: P. Justiano P – 35) **R. Reloj**, Ca. Arzobispo Merino 26, Sto. Domingo. **L.P:** Dir: P. J. Santana.

36) **R. Ocoa**, San José de Ocoa.

37) **R. Cibao**, B. Monción 17, Santiago. **L.P:** Dir: D. González.

38) **R. Novedades**, La Vega – 39) **R. Programa Quisqueya**, Edif. Jaar, Sto. Domingo. **L.P:** Dir: V. M. Furment.

40) **R. Santa Maria**, Sto. Cerro, La Vega. **L.P:** Dir: P. Wenceslao G.

41) **R. Merengue**, Apt. 57, San Francisco de Macoris.

42) **La Voz del Biran**, Apolinar Perdomo 1, Barahona. **L.P:** E. Lama.

43) **La Voz del Progreso**, Box 267, San Francisco de Macoris. **L.P:** Dir: J. Raposo P.

44) **R. Tropical**, Ca. Paris 116, Sto. Domingo. **L.P:** Dir: C. Valoy.

45) **R. Bonao**, Ca. Duarte Esq. Mella, Bonao. **L.P:** Dir: J. Aquino T.

46) **R. Radio**, Apt. 209, El Conde, Sto. Domingo. **L.P:** Dir: R. A. Martinez G.

47) **R. Bani**, Ca. U. Guerrero 24, Oeste, Bani. **L.P:** Dir: M. E. Bello.

48) **La Voz de Oriente**, Ca. Duarte 30, San Pedro de Macoris. **L.P:** Dir: F. M. Donastorg – 49) **R. Centro**, Ca. 16 de Agosto 23, San Juan de la Maguana. **L.P:** Dir. Gen: I. Aquiles R – 50) **R. ABC**, Ca. 28 No. 60, Villas Agricolas, Sto. Domingo. **L.P:** Dir: J. Nelson R. **FM:** 105Mc.

51) **Ondas del Valle**, Ca. Restauración 2, La Vega. **L.P:** Dir: D. V. de Moya.

52) **R. Tricolor**, Ca. 18 No. 58, Sto. Domingo. **L.P:** Dir: G. Guerrero.

53) **R.Dif. HIAK**, Sto. Domingo – 54) **La Voz del Caribe**, San Pedro de Macoris.

55) **R. Salcedo**, Ca. 27 de Febrero 27, Salcedo. **L.P:** Dir: P. M. Bencosme C.

56) **R. Constanza**, Ca. Duarte, Constanza. **L.P:** Dir: R. Marún T.

57) **R. Puerto Plata**, Ca. E. Brito. **L.P:** Dir: J. A. Martinez.

58) **R. Magua**, Ca. Santana, Mata Mayor. **L.P:** Dir: E. F. Astacio.
59) **R. Azul**, Ca. San Luis 25, Santiago. **L.P:** Dir: L. Atiles.
60) **R. Gabino**, Ca. Caonabo 81, Moca. **L.P:** Dir: G. Nuñez.
61) **R. Azua**, Ca. Francisco del Rosario Sánchez 6, Azua. **L.P:** Dir: J. A. Brea P – 62) **R. Nagua**, Nagua. **L.P:** Dir: S. Callado G.
63) **R. Pueblo**, Centro de los Hereos, Sto. Domingo. **L.P:** Dir: P. Pou.
64) **R. Union**, Apt. 410, Sto. Domingo. **L.P:** Dir: R. Peralta P.
65) **Emis. HIBI**, Ca. San Francisco Esq. Castillo, San Francisco de Macoris. **L.P:** Dir: J. A. Tavarez.
66) **R. San Pedro**, Av. F. Dominguez C, San Pedro de Macoris. **L.P:** Dir: B. A. de Soto.

EL SALVADOR

L.T: GMT – 6 h – **Pr.L:** Spanish.

GOVERNMENT DEPT. FOR BROADCASTING

ADDR: Ministerio del Interior, Palacio Nacional, San Salvador.

ASOCIACIÓN SALVADOREÑA EMPRESARIOS RADIODIFUSION

ADDR: Apt. Postal 720, San Salvador.
STATIONS: All st's comm. exc. R. Nacional, 51) (Cultural).
Short Waves: Call: YS—. *=inactive.

	Call	kc	m	kW	Name
1)	CB	4840	61.98		La Voz del Pacifico, Sonsonate
2)	W	*5985	50.13	1	R. Santa Ana
3)	S	6010	49.92	5	R. Nacional de El Salvador, San Salvador: 12.00–04.15
4)	KL	*6090	49.26	1	Radiocadena YSKL, San Salvador
5)	C	*6096	49.21	1	Ondas Populares y Deportivas, San Salv.
6)	P	*6150	48.78	0.3	La Voz de Cuscatlán, Cojutepeque
7)	UA	*6190	48.47	1	R. Mil Cincuenta, San Salvador
8)	V	*9545	31.43	1	La Voz del Comercio, Santa Ana
3)	S	9555	31.40	5	R. Nac. de El Salvador, San Salvador: 12.00–04.15
9)	Y	*11725	25.58	1	R. Victoria, San Salvador
10)	AX	*11950	25.10	1	La Voz Panamericana, San Salvador

Medium Waves: Call: YS—; °=Short Wave; *=under constr.

	Call	kc	kW		Call	kc	kW		Call	kc	kW
11)	FG	550	0.5	27)	RC	*860	1	42)	OA	1120	1
12)	ABC	560	10	28)	AR	870	1	43)	G	*1130	0.5
13)	EB	580	10	29)	CD	880	0.5	44)	T	1140	3
14)	NK	600	5	30)	LA	*890	1	45)	CF	1150	1
15)	OP	620	5	31)	QJ	910	10	1)	CB	°1175	0.5
16)	LN	630	10	2)	W	°930	1	46)	DL	1200	1
3)	S	°655	10	32)	TG	940	1	47)	JB	*1230	1
17)	QR	700	5	33)	GH	950	1	48)	I	1250	3
18)	RA	720	5	34)	TW	960	0.25	49)	QZ	1270	0.5
19)	R	730	10	9)	Y	°970	1	8)	V	°1280	1
20)	RM	740	5	35)	MS	970	0.25	50)	HX	1300	1
21)	KLA	750	10	36)	AN	*980	1	51)	HQ	1330	5
4)	KL	°760	10	37)	TA	990	5	52)	XW	1340	1
22)	KLB	770	5	5)	C	°1015	10	53)	XX	1350	1
23)	LU	780	1	7)	U	°1050	10	54)	CD	1360	5
10)	AX	°800	10	38)	DM	1080	5	55)	MQ	1370	0.5
24)	FA	810	1	39)	EM	1080	1	56)	JI	1400	1.5
25)	DR	820	5	40)	MG	1090	1	57)	HF	1430	0.5
26)	PX	830	4	41)	RF	1100	1	58)	ON	1470	2
24)	F	840	5								

Circuito YSR (Comm.): (St's 18), 19), 20)) – **Addr:** Apt. Postal 720, San Salvador. **Te:** 3250. **Cable:** Yesere. **D.Prgr:** All st's 12.00–06.00. **Ann:** "Circuito YSR, la emisora popular". **V.** by QSL-card and letter. **Re.** in Sp. **E.** Prgr. schedule free.
Radio Televisión YSU, S.A. (Comm.): (St's 2), 7, 12), 17)) – **Addr:** Apt. Postal 1050, San Salvador. **Te:** 1050. **Cable:** Ysua. **D.Prgr:** All st's 12.00–06.00. **N:** 03.30, 05.50+short N. every 15 min. **Ann:** "En El Salvador, Centro América transmite R. Cadena YSU". **V.** by QSL-card and letter. **Re.** in Sp. **E** – Prgr. schedule free.
Cadena Radial Salvadoreña, S.A: (St's 13), 25), 39). – **Addr:** Edif. Torre Lopez, 3° piso, San Salvador. **Te:** 3331. **Cable:** Carasal. **D.Prgr:** All st's 12.00–06.00. **N:** Every 15 min's.
Radio Cadena YSKL: (St's 4), 21), 22), 45)) – **Addr:** Box 1329, San Salvador. **Te:** 6830. **D.Prgr:** YSKL 24 h. **Other st's:** 12.00–07.30. **N:** every 15 min.

Short Waves:
1) Ca. Oriente 19, Sonsonate – 2) Santa Ana. **V.** by QSL-card.
3) 2a Avenida Sur 113, San Salvador. **Te:** 4376. **Cable:** "Almacus". **L.P:** Dir. Gen: A. Parada h. Dir. of Prod: A. Alfonso M. Dir. Tec: A. Hernandez. **D.Prgr:** N: 18.45, 21.45, 00.00, 04.00. Also short news every 15 min's. **Ann:** "Esta es YSS R. Nacional de El Salvador, transmite YSS R. Nacional de El Salvador, Centroamerica" or "Esta es YSS "Alma Cuscatleca", la primera emisora Fundada en Centroamerica". **Int-Sig:** Four notes on Xylophone. **V.** by QSL-card and letter. Prgr. schedule free. Recordings accepted.
4) R. Cadena YSKL (see above).
5) Ca. Oriente 218, San Salvador. **Ann:** "Esta es YSC, R. 1015 Ondas Populares y Deportivas en San Salvador, Centro América, Laboremos por la Paz, la Cultura y el Deporte".
6) Cojutepeque, Dept. de Cuscatlan – 7) Apt. Postal 1050, San Salvador. **V.** by letter – 8) Colonia Sta. Lucia 43B, Santa Ana – 9) Ca. Gerardo Barrios 627, San Salvador – 10) 2a Av. Norte 319, San Salvador. **Cable:** Ysar.

Medium Waves:
D.Prgr: Approx. 12.00–05.00.
11) **R. Variedades**, 3a Ca. Oriente 19, Sonsonate – 12) **Radioemisora Salvadoreña**, San Miguel – 13) **Cadena Radial Salvadoreña** (see above) – 14) **R. Exitos**, Cra. Planes de Ronderos, San Salvador.
15) **Radioforma**, 3a Av. Sur 71, Santa Ana – 16) **R. 630**, Primera Av. Sur 428, San Salvador – 17) **R. Morazán**, Canton ez Nispero, Mejicanos – 18) **Circuito YSR**, Santa Ana – 19) **Circuito YSR**, Colonia Centro América, San Salvador.
20) **Circuito YSR**, Cra. Internacional, San Miguel – 21) **R. Universal**, Colonia España, Santa Ana – 22) **R. Universal**, San Miguel – 23) **R. Lux**. Cantón S. L. Mariona, Cuscatangingo – 24) **R. Vanguardia**, Ca. Oriente 424, San Salvador.
25) **R. Tropical**, Santa Ana – 26) **R. Pax**, Ciudad Jardin, San Salvador – 27) **R. Tecána**, Cra. Internacional, Santa Ana.
28) **R. Comercial**, Poniente dez Cantón, S. Antonio, San Salvador.
29) **R.Dif.YSCD**, Santiago de Maria, Usulutan – 30) **R. Musical**, 4a Ca. Poniente, Santa Ana.
31) **Radiopolis**, Ca. Poniente 3038, San Salvador – 32) **R. Sonora**, Ca. Principal, Cuscatancingo, San Salvador – 33) **R. Minuto**, 9a Ca. Oriente 17, San Miguel – 34) **R. Centro**, Ca. Oriente, Sonsonate.
35) **R. Centroamericana**, Ca. Poniente 3038, San Salvador – 36) **La Voz De Los Ausoles**, Ca. Poniente, Ahuachapán – 37) **R. Continental**, Colonia Alfaro, Mejicanos – 38) **Cadena Radial Salvadoreña**, San Miguel – 39) **R.Dif YSEM**, Planes De Renderos.
40) **La Voz del Espino**, Ahuachapán – 41) **R. Femenina**, Edif. Central, San Salvador – 42) **R. Libertad**, San Salvador – 43) **R. Chaparrastique**, Ca. Oriente 46, San Miguel – 44) **R. El Mundo**, Apt. Postal 210, San Salvador – 45) **Ondas Orientales**, Cra. Ci. S. Miguel, La Union.
46) **La Voz Popular Salvadoreña**, Canton Zacamic, Mejicanos.
47) **R. Sistema Cultural**, Ca. Panamericana, Santa Ana.
48) **R. Reloj**, Edif. Escobar, San Salvador – 49) **R. 1270**, Contiguo campo Marte, San Miguel.
50) **Radiocadena 1300**, Cantón Delicias del Norte, Cuscatancingo.
51) **R.Progreso**, Apt. 855, San Salvador – 52) **R.San Miguel**, Ruta Militar, San Miguel – 53) **R.Femenina**, Mejicanos – 54) **Cadena del Pacifico**, Santiago de Maria.
55) **La Voz de Las Colinas**, Nueva San Salvador – 56) **La Voz del Litoral**, Usulután – 57) **R. Caribe**, Cojutepeque – 58) **R.Cristal**, Colonia Centro América, San Salvador.

GUADELOUPE (French West Indies)

L.T: GMT –4 h – **Pr.L:** French.

OFFICE DE RADIODIFF. TELEVISION FRANCAISE (ORTF)

ADDR: B.P. 402, Pointe á Pitre. **Te:** 1320 (B.P. 73, Basse Terre. **Te:** 211648) – **L.P:** Délégue Reg: F. Jacquemart (for Guadeloupe, Martinique, Guyana). St. Mgr: M. Villeneuve. Chief Tech. Services: E. Angele.
STATIONS: Pointe-a-Pitre 640kc 20kW – Basse Terre 1420kc 4kW.
HOME SCE: 10.30–12.00, 15.00–18.00, 20.00–02.00 – **N:** 10.30 (relay Paris), 11.00, 11.30, 15.00, 16.00, 17.00, 22.00, 23.00, 24.00 – **ANN:** "Ici Office de R. diff. Télévision Française Basse Terre (or Pointe á Pitre)" – **INT-SIG:** Guitar – **V.** by letter. **Rp.** – **ALF:** 30 Frcs.

GUATEMALA

L.T: GMT – 6 h – **Pr.L:** Spanish.

DIRECCION GENERAL DE RADIODIFUSION Y TELEVISION NACIONAL

ADDR: Edif. de la Tipografia Nacional, Ca. 18 de Septiembre 6-72 Zona 1, Guatemala. **Te:** 23318. **Cable:** Tevenac. **L.P:** Dir. Gen: M. Mendoza H.
STATIONS: All st's comm. exc. 12), 22), 25), 29), 61) Gov; 1), 2), 3), 5), 9), 10), 11) Educ. **Locations:** Guatemala City exc. where indicated.
Short Waves: Call: TG—. *=inactive.

	Call	kc	m	kW	Name	Approx. h of tr.
1)	RW	2340	128.4	0.2	La Voz Catolica de Barillas:	23.30–02.30
2)	SC	2350	127.6	0.5	La Voz de Candelaria, Huehuetenango:	22.45–24.00
3)	BA	2360	127.1	0.25	R. Maya Barillas, Huehuetenango:	00.10–03.00
4)	ZB	*3365	89.45	0.15	R. Novales.	
5)	VN	3360	89.29	0.2	La Voz de Nahuala, Nahualá, Sololá:	00.00–02.00

Call	kc	m	kW	Name	Approx. h of tr.
6) CH	3380	88.76	1	R. Chortis, Jocotán:	18.00–02.00
7) QH	4872	61.58	0.2	R. Sta. Cruz, Sta. Cruz:	15.00–01.00
8) LAB	*4900	61.22		R. Victoria, Mazatenango	
9) RY	4920	60.98	0.2	La Voz de San Raymundo, S. Raymundo:	23.00–06.00
10) RH	4940	60.73	0.2	Escuela Relaciones Humanas.	
11) NA	5955	50.40	5	R. Cultural:	12.00–03.00
12) MZ	5970	50.25	0.5	R. Nacional, Mazatenango	
13) AR	5980	50.17	1	R. Quetzal:	13.00–04.00
14) JA	5990	50.08	5	R. Nuevo Mundo:	12.00–06.00
15) TA	6000	50.00	1	R. Sonora:	12.00–06.00
16) DA	6020	49.83	2	La Voz de Occidente, Quetzaltenango:	12.00–05.00
17) TQ	6030	49.75	5	R. Internacional:	12.30–06.00
18) CO	6040	49.67	0.5	La Voz del Trópico, Quetzaltenango	
19) XB	*6050	49.59		R. Centro Musical	
20) RLA	6060	49.50	1	R. Cadena Landivar, Quetzaltenango:	11.00–06.00
21) PA	6070	49.42	1.2	R. Palmeras, Escuintla:	11.00–05.00
22) SM	6080	49.34	0.5	R. Nacional, San Marcos	
23) DZ	6090	49.26	2	R. Centroamericana:	12.30–02.00
24) OA	*6100	49.18		La Voz de las Americas	
25) QA	6110	49.10	1	La Voz de Quezaltenango:	13.00–04.00
26) AO	6120	49.02	0.35	La Voz de la Perla Oriente, Chiquimula	
27) HC	6140	48.86	1	R. Universal:	12.00–06.00
28) AZ	6150	48.78	0.5	R. Continental:	12.00–06.00
4) ZA	6160	48.70	0.25	R. Club:	12.00–06.00
29) WB	6180	48.54	1	La Voz de Guatemala:	12.00–06.00
30) FP	6205	48.35	0.5	R. Nacional Tikal, Flores Peten:	18.30–20.20, 01.00–04.30
31) KN	*6200	48.39		R. Latina	
11) NB	9668	31.03	5	R. Cultural:	03.00–04.00
29) WA	9760	30.74	10	La Voz de Guatemala:	12.00–06.00
25) QB	11700	25.64	1	La Voz de Quezaltenango:	13.00–04.00
32) RA	11750	25.53	0.5	R. Modelo, Retalhuleu	
33) IZ	11780	25.47	0.025	La Voz de la Marimba	
26) WA	15170	19.78	10	La Voz de Guatemala: irr	

Medium Waves: Call: TG—; °=Short Wave; *=also FM.

Call	kc	kW	Call	kc	kW	Call	kc	kW
34) BOL	560*	10	26) AL	°930	0.8	31) K	°1240	5
21) PR	°570	0.4	28) AX	°960	0.5	58) L	1250	1
35) Y	580*	1	46) AF	950	5	59) LG	1260	0.5
36) GA	600*	1	47) CQ	980	1	60) AJ	1270	0.7
29) W	°640	10	48) AH	1000	0.2	13) AQ	°1280	1
37) MQ	670	0.4	49) UX	1020	10	61) TU	1290	0.5
38) RT	680	0.5	19) XA	1040*	10	62) MU	1300	0.2
39) RS	690	2	16) D	1070	0.35	63) LK	1320	0.5
40) HR	700*	10	20) RL	°1070	2	29) WC	°1360	10
11) N	°720	10	50) C	1080	0.5	64) AC	1390	0.5
41) VA	740	0.5	51) AV	1090	1	65) GH	1410	0.5
42) RF	760	0.5	31) K	°1100	1	66) RP	1420	0.5
43) BX	770	0.5	52) RR	1120*	10	67) AG	1430	0.5
27) HB	°780	1	15) T	°1140*	10	12) MS	°1450	0.5
24) O	800*	5	4) Z	°1160	0.5	18) COA	°1470	0.5
25) Q	°810	1	20) RL	°1170	2	6) IZ	°1460	0.5
17) TQ	°820	1	53) AN	1180	0.25	68) HU	1480	0.5
40) KL	840*	1	54) ED	1200	1	23) DX	°1520	0.5
44) X	860	3	55) LL	1220	0.5	69) MG	1530	1
22) SM	°870	1.5	56) AT	1230	1	32) RE	°1550	1
14) J	°880*	10	57) YC	1240	0.5	70) VE	1560	10
45) TL	920	5						

Short Waves:

1) Convento Barillas, Huehuetenango. V. by QSL-card.

2) Convento Jacaltenango, Huehuetenango. **L.P:** St. Mgr: A. Lopez. Dir. Tec: R. P. J. McNeill. **D.Prgr:** Spanish 22.45, Jacalteco 23.50. **Ann:** "Esta es TGSC, La Voz de Nuestra Señora de Candelaria, transmitiendo en una frequencia de dos mil tres cientos cincuenta kc desde el Pueblo de Jacaltenango en el Departamento de Huehuetenango en la República de Guatemala en Centro América".

3) Santa Cruz Barillas, Huehuetenango. **L.P:** St. Mgr: L. W. Veith. Dir. Tec: D. Ekstrom. **D.Prgrs:** 00.10 Chuj, 00.30 Kaujobal, 01.30 Mam, 02.00 Spanish. V. by letter.

4) 6a Ave. 1–08 Z–1, Guatemala. **L.P:** Dir: H. E. Sagastume.

5) Nahualá, Dpto. Sololá. **L.P:** St. Mgr. & Dir. Tec: Sister G. M. Druffel G. **D.Prgr in Quiché & Spanish:** 00.00–02.00. **N. in Quiché:** 01.50. **Ann:** "Esta es TGVN La Voz de Nahualá en el Departamento de Sololá, Guatemala, America Central". V. by letter. **F.PL:** 1kW power & extension of prgr's.

6) Jocotán. **L.P:** Dir. Gen: P. Leon R. St. Mgr: A. Gomez. V. by letter. Recordings accepted.

7) Casa Social, Sta. Cruz del Quiche. **L.P:** Dir: F. Gonzales G. **D.Prgr:** Spanish Maya Quiche: 23.00–23.30, 00.30–01.00. **Ann:** "Esta es la emisora Cultural, R. Sta. Cruz". V. by letter.

8) Mazatenango, Such.

9) Mpo. San Raymundo. V. by QSL-card. Recordings accepted.

10) 12 Ca. 3–38 Z–1, Guatemala.

11) Apt. 601, Guatemala (owned by Central American Mission, 3611 Congress Ave, Dallas 19, Texas, US). **L.P:** St. Dir: & Dir. Prgr: D. Ruthledge. Dir. Tec: E. Yoder. **D.Prgr:** On 720kc: 11.00–04.00 in Spanish; On 5955kc: 11.00–03.00 in Spanish. **N:** 13.00, 19.00, 01.00. On 9668kc: 03.00–04.00 in **English. Ann:** E: "These are your Good News Stations, TGN and TGNA broadc. from Americas heart——". Sp: "Estas son sus emisoras culturales TGN y TGNA". V. by QSL-card. Rp. Prgr. schedule free. **F.PL:** 6×1kW repeater st's. FM.

12) Mazatenango Such. **L.P:** Dir. R. Escobar.

13) 12 Ave. 26–27 Z-5, Guatemala. **L.P:** Dir: M. T. de la Rosa H. **Ann:** "R. Quetzal la emisora simbolo en Guatemala C. A. 1280kc onda larga, 5980kc onda corta".

14) Apt. Postal 281, Guatemala. **L.P:** St. Mgr: M. Cotero A. Dir: Tec: J. de la Cerda. **D.Prgr:** N: 12.45, 19.00, 01.00. **Ann:** "Esta es R. Nuevo Mundo con la musica mas cervana a su recuerdo", V. by QSL-card.

15) 5a Ave. 16–38 Z-1, Guatemala. **L.P:** Dir. M. R. Tejada. **Ann:** "Con Diez mil watts transmite en Guatemala", R. Sonora, 1140kc onda larga, 6000kc onda corta".

16) 7a Ave. 0–26, Z-1, Quetzaltenango. **L.P:** Dir: J. A. Yllescas F. **Ann:** "TGD 1070kc onda larga, TGDA 6020kc onda corta, R. La Voz de Occidente en Quetzaltenango, Guatemala". V. by QSL-card.

17) KM. 12 Carretera Roosevelt, Guatemala. **L.P:** Dir. J. Monteros L. **Ann:** "TGTO R. Internacional de Guatemala en 820kc onda larga, 6030kc onda corta, auditorio en toda la República". **Int-Sig:** Electrical Xylophone. V. by QSL-card.

18) Coatepeque, Quetzaltenango.

19) 5a Ca. 0–26, Z-1, Guatemala. **L.P:** Dir: B. de Leon. **Ann:** "TGXA R. Centro Musical 1040kc".

20) 14 Ave. "A" 78, Quezaltenango. **L.P:** Dir. Gen: H. Diaz. Dir. Tec: C. Augusto D. **D.Prgr: N:** 13.00, 18.30, 01.00. **Ann:** "Esta es R. Cadena Landivar, de Quetzaltenango, transmitiendo para onda larga en 1170kc, onda corta 6060kc banda de 49 metros y FM 91.2Mc". **Int-Sig:** Xylophone.

21) Escuintla. **L.P:** Dir: C. H. Melgar P. V. by QSL-card.

22) San Marcos. **L.P:** Dir: J. Pablo Q.

23) 2a Ca. 36–89, Z-11, Guatemala. **L.P:** Dir: C. Paynado J. **D.Prgr:** (mw) 10.00–06.00. **Ann:** "Esta es la emisora gigante, R. Centroamericana, transmitiendo desde Guatemala, al extremo de cuadrante". V. by QSL-card. Recordings accepted.

24) 2a Ave, 13–39, Z-1, Guatemala. **L.P:** Dir. J. Flamenco y Cotero. **Ann:** "TGO, La Voz de las Americas".

25) Apt. Postal 113, Quetzaltenango. **L.P:** Dir: J. C. Loarca del Valle. **D.Prgr:** N: 18.30, 03.20. **Ann:** "Esta es TGQ La Voz de Quetzaltenango, en Quetzaltenango, Guatemala Centroamérica". V. by QSL. card or letter. Recordings accepted.

26) Chiquimula. **L.P:** Dir: A. Liu.

27) IIa Ave 5–27, Z-1, Guatemala. **L.P:** M. T. Conde. **Ann:** "R. Universal". V. by QSL-card.

28) 13 Ca. 12–26, Z-1, Guatemala. **L.P:** Dir: R. Vizcaino R. **Ann:** "Difunden las emisoras de sonido perfecto y alta fidelidad, Radio Continental desda la capital de Guatemala una audición perfecta en toda la República".

29) Ca. 18 de Septiembre 6–72, Z-1, Guatemala. **Te:** 23318. **Cable:** Tevenac. **L.P:** Dir. Gen: M. M. Hidalgo. Dir. Tec: E. Gomez. Dir. Prgr: J. Alberto Fernandez. **D.Prgr: N:** 18.30. **Ann:** "Esta es TGW La Voz de Guatemala" (followed by 3 xylophone notes). V. by QSL-card. Recordings accepted. **F.PL:** 20kW on 1360kc.

30) Ciudad Flores Peten. **L.P:** Dir. Prof. J. E. Rosado P. **Ann:** "R. Nacional Tikal. TGFP, La Voz de la Leyenda Maya en el Horizonte Norte". V. by special letter.

31) 6a Av. 10–45, Z-1, Guatemala. **L.P:** Dir: H. Gonzales G. V. by QSL-card – 32) Retalhuleu – 33) 19 Av. 1–46, Z-6, Guatemala.

Medium Waves: D.Prgr: 12.00–05.00 Approx.

34) **R. Cinco Sesenta**, 30 Ave, 3–40, Z-11, Guatemala – 35) **R. Progreso**, 6a Ave. 10–50, Z-1, Guatemala – 36) **La Voz de la Libertad**, Ca. 6–77, Z-1, Guatemala – 37) **R. Retama**, San Marcos – 38) **R. Fabulosa**, Via 6, 3–74, Z-4, Guatemala – 39) **R. Sur**, Escuintla – 40) **R. Mundial**, 2a Ave, 6–45, Z-1, Guatemala (TGKL=R. Emperador). **D.Prgr:** 11.45–06.00. V. by QSL-card – 41) **R. Monumental**, Antigua – 42) **R. Faro Aviateca**, la Ca. 6–90, Z-9, Guatemala – 43) **R. Corporacion**, Quetzaltenango – 44) **R. Ciro's**, 8a Ca. 2–28, Z-1, Guatemala. 45) **La Voz de la Telefunken**, 4a Ca. y 20 Ave, Z-14, Guatemala. **Cable:** Telefunken. V. by letter – 46) **R. Indiana**, Av. la Libertad, Mazarenango – 47) **R. Central**, 6a Ave, 1–31, Z-9, Guatemala – 48) **R. Mil**, 6a Ave, 4–61, Z-10, Guatemala – 49) **R. Panamericana**, Carretera Roosevelt, Guatemala.

50) **R. dif. TGC**, 7a Ave, 20–20, Z-1, Guatemala – 51) **R. Cobán**, Coban Alta Verapaz – 52) **R. Reloj**, 2a Av. 8–67, Z-9, Guatemala. **D.Prgr:** 12.00–06.00. V. by letter – 53) **R. Antigua**, Antigua – 54) **R. Mil Doscientos Diez**, 3a Ave, 13–07, Z-1, Guatemala.

55) **R. Columbia**, 9a Ave, 13–17, Z-1, Guatemala – 56) **R. Atlantida**, P. Barrios – 57) **R. Istmania**, Lavarreda, Guatemala – 58) **R. Victoria**,

Mazatenango – 59) **La Voz de los Mayas**, 9a Ca. 0–02, Z-1, Guatemala. 60) **R. Tropicana**, Escuintla – 61) **R. Nacional, Totonicapan** – 62) **R. Mil Trescientos**, 2a Ave, 8–67, Z-9, Guatemala – 63) **R. Cumbre**, 6a Ca. 0–32, Z-1, Guatemala – 64) **R. Cultural de Colomba**, Quetzaltenango.
65) **R. Xelaju**, Quetzaltenango – 66) **La Voz de la Eterna Primavera**, 8a Ca. 3–18, Z-1, Guatemala – 67) **La Voz de Huehuetenango**, Huehuetenango – 68) **R. Circuito TGHU**, Posada Belem, Antigua – 69) **R. Nacional Matias de Galvez**, Pto. Matias de Galvez – 70) **R. La Voz Evangélica de América**, 22 Ca. 1–15, Z-1, Guatemala. **L.P:** Dir. G. Rosales.

HAITI

L.T: GMT – 5 h – **Pr.L:** French, Creole.

DEPARTMENT DES TRAVEAUX PUBLICS
Service des Télégraphes, Telephones & Radios, Port-au-Prince.
STATIONS: All St's comm. exc. 1), 2), 10)

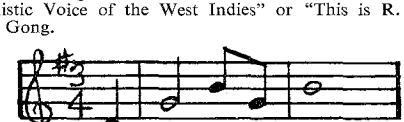
Short Waves: Call: 4V—. *=inactive.

	Call	kc	m	kW	Name and h of tr.
1)	U	2410	124.5	0.25	R. Lumière, Les Cayes: *10.00–13.30* 20.00–02.30 (Sun 10.00–02.30)
2)	SO	2540	122.5	0.25	R. St. 4VEH, Cap Haitien: 10.30–15.00, 16.55–01.30
3)	YM	4940	60.73	0.5	R. Diffusion Haitienne, Port-au-Prince; 11.00–01.00
4)	GS	5020	59.76	0.5	R. Independance, Gonaives: 11.30–14.30, 17.00–20.00, 23.00–03.00. Sun 16.00–03.00
5)	GA	5030	59.64	0.15	R. Capois la Mort, Port-de-Paix
6)	AF	5090	59.00	0.2	Voix de la Grande-Anse, Jérémie: irr.
7)	B	6000	50.00	7.5	Voix de la Révolution Duvalieriste, Port-au-Prince: 11.00–04.00
9)	G	*6050	49.59	0.1	R. Union, Port-au-Prince
1)	O	6100	49.18	0.25	R. Lumière, Les Cayes: as 2410kc
10)		6100	49.18	0.54	Voix de l'Ave Maria, Cap Haitien
2)	E	6120	49.02	2.5	R. St. 4VEH, Cap Haitien: 10.30–14.00, 16.55–01.30
11)	WA	6155	48.74	0.25	R. Citadelle, Cap Haitien: 12.00–03.00 (Sun 21.00).
12)	CP	6163	48.66	0.15	Voix du Nord, Cap Haitien: 14.00–23.00
13)	HW	6195	48.43	1	R. Haiti, Port-au-Prince: W 11.00–04.00 Sun 13.30–03.00
7)	C	9485	31.61	7.5	Voix de la Révolution Duvalieriste, Port-au-Prince: 11.00–04.00
1)	U	9635	31.14	0.25	R. Lumière, Les Cayes
2)	EH	9770	30.71	0.35	R.St. 4VEH, Cap Haitien } 10.30–14.00
2)	EJ	11835	25.35	2.5	R.St. 4VEH, Cap Haitien } 16.55–01.30

Medium Waves: °=Short Wave. *=inactive

Call	kc	kW	Call	kc	kW	Call	kc	kW
1) I	°760	1	18) CPS	995	0.2	3) YM	°1250	0.6
1) UE	780	0.25	2) EF	°1035	10	13) W	°1325	1.5
14) LS	860	1	7) A	°1080	1.5	20) S	1385	1
15) 2A	905	0.15	9) F	°1120	0.2	21) GM	1430	1
16) JS	930	0.25	8) AB	°1150	1	12) EA	1460	0.15
17) CD	960	0.3	19) RD	1170	0.25	22) OC	*1500	

Short Waves:
1) B.P. 71, Aux Cayes (for 4VUE: B.P. 1051, Port-au-Prince) – **L.P:** Dir: L. A. Markwood. Dir. Tec: D. Hartt – **D.Prgr: Spanish** to Caribbean 13.00–13.30. **Ann:** "Votre Station c'est R. Lumière. Réseau *Cultural Haitien émettant des Cayes et de Port-au-Prince*". **V.** by QSL-card. Rp. **Pub:** Prgr.schedule.
2) Box 1, Cap Haitien. **Cable:** Ormiso – **L.P:** Dir. Gen: Dr. E. Erny. Dir. Tec: M. E. Picazo. Dir. Prgr: H. Hess – **D.Prgr:** On all freq's: 10.30–11.30 Spanish, 11.30–14.00 (Sat, Sun 15.00) English, 16.55–20.55 (Sun 19.00) French & Creole, (Sun 19.00–21.00 English), 20.55(Sun 21.00)–23.00 Spanish, 23.00–01.30 French & Creole.
Listener's Post (Mbg, DX-Prgr): Fri 12.15 to No. America – **Ann:** "Ici la Voix Evangelique d'Haiti" or "Ici R. 4VEH". Sp: "Escucha Ud. La Voz Evangelica de las Antillas" or "R. 4VEH". E: "This is the Evangelistic Voice of the West Indies" or "This is R. 4VEH" – **Int-Sig:** Gong.



V. by QSL-card or letter. Rp. preferred but not required. Re. in E Sp, F – **Pub:** Prgr.schedule (twice a year) free on request. **F.PL:** New 2.5kW st on 895 kc, 1kW on 11835.
3) Ruelle Jeanty, Port-au-Prince – **L.P:** Dir: Y. Michel – **Ann:** "Pour le Rayonnement, de la Culture et l'Avancement du Peuple Haitien, ici la Radiodiff. Haitienne, Poste 4VYM...".
4) Rue Egalité, Gonavies – **L.P:** Dir. Gen: P. Mitton. Dir. Tec: P. Baptiste. Dir. of Prgr's: E. Denis – **D.Prgr: N:** 12.30, 01.00. **Ann:** "Ici R. Independance st. 4VGS". **V.** by letter. Recordings accepted. Rp.
5) Port-de-Paix. **L.P:** Dir: A. Dorvil. Dir. Tec: G. Arthamin. **V.** by letter. **F.PI:** mw-st.
6) Jérémie. **L.P:** Dir. Tec: A. Félix
7) B.P. 1143, Port-au-Prince. **Te:** 3471. **Cable:** Radioco. **L.P:** Dir. Gen: J. Borges. St.Mgr: M. Canal.
D.Prgr: La Voix de la République d'Haiti: D 12.00, 19.30, 23.15, 02.30 (*rel. by most st's at Port-au-Prince*). **N:** *Every h on the h at 14.00–22.00*, 02.45. **Arabic:** (comm. prgr): Sun 17,15–18.15.
Ann: "Au service du Peuple Haitien, au service de la Culture, dans l'unité, l'ordre, le travail et le progrès, ici la Voix de la Révolution Duvalieriste, Postes 4VA, 4VB et 4VC, émettant de Port-au-Prince, Capitale de la République d'Haiti, Patrie de Jean Jacques Dessalines le Grand, l'Emancipateur, d'Alexandre Pétion, le Panaméricaniste, d'Henri Christophe, le Civilisateur et de François Duvalier, le Rénovateur" – **Note:** Uses alternatively 49 or 31 m.b;
8) 23 Ruelle Chavannes, Port-au-Prince. **Te:** 4115. **D.Prgr:** During week-ends: 24 h. **N:** 13.00, 00.00 – **Ann:** "Ici R. Caraibes, Poste 4VAB et 4VEB émettant sur la bande des 260m 86, et celle des 49m de Port-au-Prince, Capitale de la République d'Haiti, Grandes Antilles". **V.** by QSL-card or letter. Rp. – 9) 1 Ruelle Louverture, Port-au-Prince. 10) Eveché du Cap Haitien, Cap Haitien. – 11) Cap Haitien – **L.P:** Dir: S. Wainwright – **V.** by letter. – 12) Cap Haitien – **L.P:** Dir. Tec: E. Anacréon – **D.Prgr:** mw 12.30–03.00; sw 14.00–23.00. **V.** by QSL-card and letter –13) P.O. Box 737, Port-au-Prince. **L.P:** Dir: R. Widmaier. **Ann:** "Vous écoutez R. Haiti, émettant dans les bandes de 230, 49 et 31 mètres à Port-au-Prince. R. Haiti, la station des vedettes, la vedette des stations" or "1325 sur le cadran de votre poste: R. Haiti".
Medium Waves:
14) **R. Progres**, Blvd. Dessalines 758, Port-au-Prince. **D.Prgr:** 10.00–04.00 – 15) **R. Nationale**, Route de Carrefour, Port-au-Prince. **D.Prgr:** 10.00–04.00 (Sun/Mon 05.00) – 16) **La Voix des Gonaives**, Gonaives. **L.P:** Dir: J. Simon. 17) **R. Carillon**, Rue Dr. Aubry 157, Port-au-Prince. 18) **R. Cacique**, Rue Traversière 3, Port-au-Prince. **D.Prgr:** 11.00–02.30.
19) **R. Tropiques**, Ave. John Brown, Port-au-Prince.
20) ***R. Port-au-Prince***, Stade Sylvio Cator, Port-au-Prince. **D.Prgr:** 10.30–03.00.
21) **Magloire Broadc. Circuit**, Rue Americaine, Port-au-Prince. **L.P:** Dir: Frank C. Magloire. **D.Prgr:** 11.30 (Sun 13.30)–04.00.
22) **R. Select**, Blvd. Jn. J. Dessalines, Rue Honoré 538, Port-au-Prince (**Rlg.** Protestant st. owned by "Société Biblique et des Livres Religieux d'Haiti". (*st is silent at present; under repair*).

HONDURAS (British)

L.T: GMT – 5½ h (Su: GMT – 6 h) – **Pr.L:** English, Spanish.
RADIO BELIZE *(Gov.)*
ADDR: P.O. Box 89, Belize. **Te:** 80. **Cable:** "Radio" – **L.P:** Dir: E. G. Waight. Chief Eng: L. H. Young.
STATIONS: 834kc 359.7m 20kW – 3300kc 90.85m 5kW.
HOME SCE. in English, Spanish: 12.00–04.00. **English:** 12.00–16.00, 17.00–22.00. **Spanish:** 16.00–17.00, 22.00–03.00. **N:** 13.00(E), 16.00(Sp), *17.00(E), 18.30(E), 01.00(Sp), 03.00(E).*
ANN: English: "This is R. Belize". Spanish: "Esta es R. Belice".
INT-SIG: Opening: "Land of the Gods". Closing: "Land of the Gods" and UK Nat. Anthem – **V.** by QSL-card.

HONDURAS (Rep.)

L.T: GMT – 6 h – **Pr.L:** Spanish.
DIRECCION GENERAL DE COMUNICACIONES ELECTRICAS, Tegucigalpa – **L.P:** Dir: F. Pon Aguilar

STATIONS: Shortwaves: Call HR--
Where no times indicated, usually 11.00–06.00.

	Call	kc	m	kW	Name & h of tr.
1)	D4	4755	63.09	0.5	R. Oriental, Danli
2)	LC	4770	62.89	1	R. Continental, San Pedro Sula
3)	ST	4790	62.29	1	R. 1° de Mayo, Tela: 12.00–03.00
4)	VC	4820	62.24	5	R. Evangelica, Tegucigalpa: 12.00–20.00, 23.00–02.30(Sun 03 30)
5)	VJ	4845	61.92	0.5	R. Catolica S. Isidro, La Ceiba: W 17.00–19.00, 23.00–02.00. Sun 13.30–18.00, 23.00–02.00
6)	VA	4855	61.79	1	R. Corona, San Pedro Sula
7)	QN	4880	61.48	0.5	La Voz del Atlantico, Puerto Cortez
8)	VL	4890	61.35	1	R. Lux, Olanchito: 11.00–02.00
9)	SY	4914	61.05	0.5	La Voz del Pacifico, San Lorenzo
10)	OM	4920	60.98	1	R. Ulúa, El Progreso: 10.00–05.00
11)	PL	4920	60.98	1	R. Progreso, El Progreso
12)	VS	4930	60.85	1	R. Católica, Tegucigalpa: 10.00–05.00(Sun 03.00)

	Call	kc	m	kW	Name & h of tr.
13)	VN	4940	60.73	0.5	R. Sonora, Danli
14)	RZ	4950	60.60	1	R. Juticalpa: 11.25–03.00
15)	TL	*4950	60.60	1	R. Tic-Tac, Tegucigalpa
16)	QW	4995	60.06	1	R. Trópico, Tela
17)	OE	5035	59.58	1	La Voz de las Fronteras, Ocotepeque
18)	N	5875	51.05	1	La Voz de Honduras, Tegucigalpa: 11.00–24.00
19)	VF	5955	50.37	1	R. Exitos, Tegucigalpa
20)	HR	5960	50.34	1	La Voz de Occidente, Sta. Rosa de Copan: 11.00–02 00
21)	WW	5972	50.23	1.25	La Voz de Centroamerica, San Pedro Sula: 11.00–05.00
22)	PI	5995	50.04	1	El Eco de Honduras, San Pedro Sula
23)	SP	6020	49.83	1	R. Moderna, Tegucigalpa
15)	TL	6035	49.71	1	R. Tic-Tac, Tegucigalpa: 11.00–05.00
24)	DN	6040	49.67	0.5	R. Caribe, La Ceiba
25)	LP	6050	49.59	1	R. America, Tegucigalpa
26)	U	6060	49.50	1	R. Centro, Tegucigalpa
27)	MH	6075	49.38	5	La Voz del Junco, Sta. Bárbara
28)	NQ	6090	49.26	1	R. Morazan, Tegucigalpa
29)	XW	6110	49.10	1	R. Comayagüela, Tegucigalpa
30)	ME	6135	48.90	1	R. El Patio, La Ceiba
31)	XE	6145	48.82	1	R. Mil Treinta, Juticalpa: 11.00–05.00
32)	TV	6165	48.66	1	R. Televisión, Tegucigalpa
33)	MT	6185	48.50	1	R. Molina Rojo, San Pedro Sula
34)	D2	6195	48.43	1	La Voz de Atlantida, La Ceiba

Medium Waves: Call HR--. °=also on shortwave.

Call	kc	kW	Call	kc	kW	Call	kc	kW
35) TX	560	1	12) VS	°910	10	7) QN	°1150	1
35) T4	590	1	42) ZE	930	1	21) VW	°1190	1/6
25) LP	°610	10	43) YW	950	1	29) XW	°1200	1
33) MT	°640	1	44) BT	960	1	50) QL	1230	1
19) VF	°650	1	10) OM	°970	1	51) YT	1270	1
18) N	°670	10	15) TL	°980	1	52) XA	1280	1
36) RT	700	1	2) LC	°1000	1	53) XX	1300	1
32) TV	°720	1	31) XE	°1030	1	54) H6	1340	1
37) TV2	720	1	45) XN	1040	1	30) ME	°1350	1
38) QQ	730	0.25	46) VH	1040	1	20) HR	°1370	1
39) JS	740	1	47) LE	1050	1	4) VC	°1380	1
24) DN	°750	1	48) XM	1070	1	3) ST	°1390	1
28) NQ	°770	10	6) VA	°1080	1	22) PI	°1400	1
40) MD	800	0.25	11) PL	1110	1	16) QW	°1420	1
41) XS	820	1	15) TL	1110	1	55) OC	1480	1
23) SP	°830	1	49) RO	1130	1	27) MH	°1500	1
26) U	°860	10						

Short Waves:

1) Hernan Mendoza M, Danli – 2) San Pedro Sula.
3) Tela. **L.P:** St. Mgr: L. Felipe G. Dir. Tec: D. Suazo. Dir. Prgr: A. Griffin h. **D.Prgr:** N: 17.30. **Ann:** "HRST R. Primera de Mayo, La Voz del Trabajador Hondureño". **V.** by letter. Recordings accepted.
4) Apt. 270, Tegucigalpa. **Te:** 51102. **Cable:** Vozevhon. **L.P:** Dir. Gen: D. R. Jones. Dir. Tec: O. Nuñez. **D.Prgr:** N: 13.00, 18.15, 01.15. **English:** 02.00–02.30. **"Songs in the night":** Sun 03.00–03.30. **V.** by QSL-card or letter.
5) Apt. Postal 14, La Ceiba. **L.P:** Dir. Gen: Rev. P. Gomez C. M. St. Mgr: J. Eguia. Dir. Tec: C. Alberto V. **D.Prgr:** N: 18.30, 23.30. **V.** by letter.
6) 14 Ca. So. 38, San Pedro Sula. **L.P:** St. Mgr: R. R. Barnett. Dir. Tec: R. A. Vargas. **V.** by letter. Recordings accepted.
7) Andrés Griffin C, Puerto Cortez – 8) Elvin E. Santos, Olanchito – 9) Alberto H. Matamoros, San Lorenzo.
10) El Progreso, Yoro. **L.P:** Dir. Gen & Dir. Tec: E. Castillo. **V.** by letter. Recordings accepted – 11) Carlos Coleman, El Progreso – 12) Apt. Postal 480, Tegucigalpa. **Te:** 22848. **L.P:** Mgr: H. A. Meoño M. Dir. Tec: A. Lardizabal G. Dir. Prgr: J. Erasmo B. **N:** W 12.15, 18.30, 00.00. **Ann:** "Esta es R. Catolica, La Voz de Suyapa". **V.** by QSL-card – 13) Jaime Nuñez Morga, Danli.
14) Juticalpa. **Te:** 2. **L.P:** Dir. Gen: V. Rubi Z. Dir. Tec: V. Guerrero D. **Ann:** "R. Juticalpa, La Expresión musical de Oriente" – **V.** by letter. Recordings accepted. **F.Pl:** mw 1240kc.
15) Apt. Postal 771, Tegucigalpa. **L.P:** St. Mgr: E. de Mena A. Dir. Tec: L. Carlos G. **Ann:** "HRTL, R. Tic-Tac de Honduras". **V.** by QSL-card. Recordings accepted. **F.Pl:** 10kw on 980kc, 5kW on 1110kc.
16) Ramón Funez A, Tela. **V.** by QSL-card or letter – 17) Edgardo Valle S, Ocotepeque
18) 8a Ca. 410, Tegucigalpa. **Te:** 20761. **L.P:** St. Mgr: R. Breve M. Dir. Tec: F. P. Aguilar. **D.Prgr:** 11.00–05.00(m.w.). **N:** 12.15, 18.15. **Ann:** "Transmite HRN, La Voz de Honduras, en Tegucigalpa, Honduras, Centro America". **Int-Sig:** Gong & Xylophone. **V.** by QSL-card. **F.Pl:** 10kW (5kW) – 19) Tegucigalpa.
20) Dr. A. Rendon H, Santa Rosa de Cópan.
21) Apt. 120, San Pedro Sula. **Te:** 1828. **L.P:** St. Mgr: I. de Sikaffy. Dir Tec: H. Merman. **D.Prgr:** N: 12.00, 17.30, 18.15, 01.30, 04.30. **Ann:** "HRVW y HRWW La Voz de Centroamerica". **V.** by letter. Recordings accepted.
22) Apt. 24, San Pedro Sula – 23) Tegucigalpa – 24) La Ceiba.
25) Apt. Postal 259, Tegucigalpa. **V.** by QSL-card.
26) Apt. Postal 642, Tegucigalpa. **V.** by letter.
27) Ca. Independencia, Sta. Barbara. **L.P:** Dir. Miguel Hasbun.
28) P.O. Box 393, Tegucigalpa – 29) Humberto Andino N, Tegucigalpa. **V.** by QSL-card – 30) Gregorio Irias, La Ceiba – 32) Apt. 734, Tegucigalpa. **V.** by letter.
31) Juticalpa. **L.P:** Dir. Gen: E. Bayardo Rodriguez. **D.Prgr:** N: 18.00. **Ann:** "Esta es R. Mil Treinta transmitiendo desde Juticalpa Olancho Honduras CA". **V.** by letter. Recordings accepted.
33) Olga L. de Kattan, San Pedro Sula – 34) Roberto Moncada, La Ceiba.

Medium Waves:

35) **R. Satélite,** Tegucigalpa (HRT4 San Pedro Sula) – 36) **R. Exitos,** San Pedro Sula – 37) **R. Télévision,** San Pedro Sula – 38) **R. Musical,** Camayagua – 39) **R. Metropolitana,** San Pedro Sula.
40) **R. Yoro,** J. Martinez, Yoro – 41) **R. San Pedro Sula,** Carlos Coleman, San Pedro Sula – 42) **R. Cortés,** Puerto Cortés – 43) **R. Panamericana, Tegucigalpa** – 44) **R. Norte,** San Pedro Sula.
45) **R. Ceiba,** Antonio R. Diaz, La Ceiba – 46) **R. Mil,** Tegucigalpa.
47) **R. Emperador,** Eduardo Morales, San Pedro Sula – 48) **R. Meridiano,** Choluteca – 49) **R. Universal,** Herman A. Padgett, Tegucigalpa.
50) **Centro Radial Hondureno,** Siguatepeque – 51) **R. Estrella de Oro,** San Pedro Sula – 52) **R. Choluteca,** Choluteca – 53) **R. Lima,** Carlos Coleman, La Lima – 54) **R. El Mundo,** San Pedro Sula – 55) **R. Bahia,** Roatán.

JAMAICA

L.T: GMT –5 h – **Pr.L:** English.

RADIO JAMAICA LTD. (Comm.)

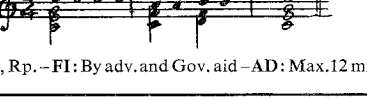
ADDR: 32 Lyndhurst Rd, Cross Rd, Kingston 5. **Te:** 68151. **Cable:** Broadco – **L.P:** Gen. Mgr: G. Binns, MA. Dir. Prgr: J. Colley. Chief Eng: W. G. Matthews
STATIONS (System: Gates): Mandeville 770kc 5kW – Point Galina 580kc 5kW – Kingston 720kc 5kW – Montego Bay 550kc 5kW.
FM: Kingston 94.6Mc 1kW, 91.9Mc 0.03kW, Christiana 90.6Mc 0.85kW.
HOME SCE. in English: 09.45–05.00(Sat 06.00) – **N:** 11.00, 12.00, 12.30, 13.00, 13.10, 15.00, 17.00, 18.00, 19.00, 22.00, 22.30, 23.00, 24.00, 02.00, 02.10, 04.55 – Imminent Hurricane warnings on the h every h of tr.
ANN: "This is R. Jamaica and Rediffusion" – **V.** by QSL-card – **FI:** By adv – **AD:** 12 min's per h.

JAMAICA BROADCASTING CORPORATION

(Comm. and public Service)
ADDR: 5 So. Odeon Ave, Kingston. **Te:** 65621. **Cable:** Jarad – **L.P:** Gen. Mgr: V. H. Ennever. Asst. Gen. Mgr: F. M. Needham. Dir. Tec: L. Stewart. Dir. Prgr: F. Hughes.
STATIONS (System: Gates):

Kingston	560kc 5kW	– Spur Tree	620kc 5kW
Montego Bay	700kc 5kW	– Point Galina	750kc 5kW

FM: Kingston 96.3Mc 1.2kW – Half Way Tree 99.9Mc 0.08kW – Christiana 91.1Mc 1.2kW.
HOME SCE: 09.45–05.00. **N:** 11.00, 12.00, 12.30, 13.00*, 13.10, 15.30, 17.30, 18.30, 21.30, 22.30, 23.00*, 00.30, 02.30, 04.00 (*=BBC) – **Wrp:** W 11.30, 12.40, 17.35, 23.32, 04.02.
ANN: "This is the Jamaica Broadc. Corporation" – "This is JBC Radio" – **INT-SIG:** Vibraphone: Chi Chi Bud (Jamaica folksong).



V. by QSL-card, Rp. – **FI:** By adv. and Gov. aid – **AD:** Max. 12 min per h.

LEEWARD ISLANDS

L.T: GMT –4 h – **Pr.L:** English.

Montserrat

RADIO MONTSERRAT (Gov.)

ADDR: P.O. Box 51, Plymouth, Montserrat. **Te:** C76. **Cable:** Radmon – **L.P:** Gen. Mgr: C. Osborne. Prgr. Mgr: V. B. Browne. Dir. Tec: D. Edgecombe.
STATION: 885kc 339.0m 0.25kW.
HOME SCE. in English: W 10.00–12.00, 15.00–17.00, 20.00–02.00. Sun 21.30–24.00 – **N:** 11.00, 16.00, 20.00, 21.00, 21.10, 01.00 – **ANN:** "This is R. Montserrat broadc. to the entire Leeward & Windward Isl. on 885kc from the Groves Botanical Gardens in Plymouth. **V.** by letter. Rp. Recordings accepted.

RADIO ANTILLES (Pr. Comm.)

ADDR: P.O. Box 35, Montserrat. **Cable:** ARC. **Te:** 223 – **L.P:** Chmn: E. Gifford. Pub.Rel.Adv: Mrs. D. Apperley. Techn. Dir: J. Horat.

Chief Eng: G. Anderson, L. Caspar. English Dept: P. Noble, J. Fletcher. French Dept: M. Daniel, B. Mulliez. Spanish Dept: M. Castillo. Listeners Sce: N. Ryan.
STATIONS (System Brown Boveri):
930kc 322.6m 200kW d No/So 730kc 411.0m 20kW n.d.
HOME SCE: 10.00–14.00, 16.00–03.00.
English: 10.00–11.00, 13.00–14.00, 20.15–23.00 – **French/English:** 11.00–13.00, 16.00–20.15, 23.00–01.00 – **Spanish:** 01.00–03.00 – **N:** on the h.
ANN: English: "This is R. Antilles". French: "Ici R. Antilles". Spanish: "Aqui R. Antilles" – **INT-SIG:** Carillon, two notes, and "Carnival in the West Indies" – V. by QSL-card or letter.

Antigua

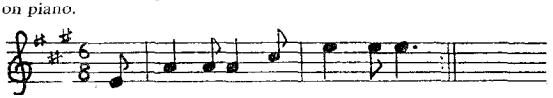
ANTIGUA BROADCASTING SERVICE (Gov.)
ADDR: St. Johns, Antigua – **L.P:** Mgr: E. A. M. John.
STATION: 620kc 483.9m 0.5kW – **HOME SCE. in English:** 10.00–13.00, 16.00–18.00, 22.00–01.00.

St. Kitts

RADIO ZIZ (Gov.)
ADDR: Springfield, Basseterre, St. Kitts – **L.P:** Mgr: K. Osborne.
STATION: ZIZ 570kc 526.3m 0.66kW – **HOME SCE. in English:** 10.45–17.00, 21.30–02.00. N: 11.00, 13.00, 14.00, 16.15 – **ANN:** "This is R. Station ZIZ" – V. by letter. Recordings accepted.

MARTINIQUE (French West Indies)

L.T: GMT –4 h – **Pr.L:** French.
OFFICE DE R. DIFF. TELEVISION FRANÇAISE
ADDR: B.P. 662, Fort de France. Te: 6060 – **L.P:** Délégue Reg: F. Jacquemart. St. Mgr: R. Coquereaux, Dir. Tec: J. A. Edel. Tec. Asst: H. Mourey.
STATIONS (G.C: 61.00W/14.30N): 1310kc 229m 50kW
3315kc, 90.50m 4kW – 4895kc 61.29m 4kW – 5994kc 50.04m 1kW.
HOME SCE. in French: On 1310kc: 10.15–02.30. **On 3315kc:** 10.15–12.00, 18.00–02.30. **On 4895kc:** 12.00–22.00. **On 5994kc:** 14.00–20.00.
N: 10.30 (relay Paris), 11.30, 17.15(local), 17.30, 23.25(local), 23.30.
ANN: "Ici Office de R. diff. Télévision Française, Fort de France" – **INT-SIG:** First eight notes of "Adieu Foulards, Adieu Madras" *on piano.*



ALF: 30 Frcs.

MEXICO

L.T: GMT –6 h (Mexico generally), GMT –7 h (Sonora, Sinaloa, Nayarit and Lower Calif.), GMT –8 h (Upper Calif.) – **Pr.L:** Spanish.
DIRECCION GENERAL DE TELECOMUNICACIONES
Departamento de Radiodifusion – ADDR: Col. Narvarte, México, DF.
STATIONS: All st's comm. exc. 2), 4), 8), 15) (XEAD only), 21), 70), 92), 115), 121) (XEJM only), 241) (Cultural).

Short Waves: Call: XE—. *=inactive.

	Call	kc	m	kw	Name and h of tr.
1)	VJ	2160	139.39	0.25	R.Dif. XEVJ, Chilpancingo
2)	SE	2380	126.0	0.35	Sria. de Educación Pública, México
3)	JN	2390	125.5	0.5	Educ. Univ. Iberoamericana, México: 12.30–13.30, 01.30–02.30
4)	JG	4820	62.24	0.2	Emis. Casa de la Cultura, Guadalajara: 20.00–05.00
5)	UMT	5960	50.34	0.25	Universidad Iberoamericana, México
6)	OI	6010	49.92	2.5	R. Mil, México: 12.00–06.00
7)	UW	6020	49.88	0.25	El Eco de Sotavento, Vera Cruz: 12.00–06.00
8)	XQOC	6045	49.63	0.25	R. Universidad Potosina, San Luis Potosi: 16.00–05.00 (Sun 13.00–01.00)
9)	XG	6065	49.46	1	R. Dif. México, México: 12.00–06.00
10)	CMT	6090	49.26	1	R. Dif. XECM/XECMT, Ci. Mante: 13.00–03.00
11)	QM	6105	49.14	0.25	R. Frecuencia Juventud, Mérida: 13.00–06.00
12)	UDS	6115	49.06	1	R. Universidad de Sonora, Hermosillo: 18.00–04.00
13)	TS	6120	49.02	0.5	R. XETS, Tapachula, Chis: 12.00–06.00
14)	RCM	*6130	48.94	0.1	R. Central de México, México
15)	RUU	6140	48.86	0.25	R. Universidad de Chihuahua
16)	WW	6165	48.66	10	La Voz de la América Latina, México: 12.00–05.00
17)	XA	*6175	48.58	0.1	R. Gobernación, México
18)	ICM	6185	48.50	1	La Voz del Maestro México 19.00–22.00
16)	WW	9515	31.53	10	La Voz de la América Latina, México: 11.50–05.15
19)	FT	9545	31.43	0.25	La Voz de Veracruz, Vera Cruz: 11.30–06.00
20)	QK	9555	31.40	1	La Hora Exacta, México: 24 h
21)	YU	9600	31.25	1	Universidad Nac. de México: 14.00–07.00
22)	QQ	*9680	30.99	1	R. Dif. XEQ/XEQQ, México
23)	MP	11740	25.55	1	R. Dif. XEMP, México
24)	BR	*11820	25.38	0.15	El Heraldo de Sonora, Hermosillo
25)	HH	11880	25.25	5	R. Dif. Comerciales, México: 12.00–06.00
25)	RR	15110	19.85	5	R. Dif. Comerciales, México: 12.00–06.00
16)	WS	15160	19.79	10	La Voz de la América Latina, México: 12.00–05.00
26)	VOZ	15200	19.74	5	R. Dif. XEVOZ, México: irr.

Medium Waves: Call: XE—. °=Short Wave.
D=Daytime operation only (12.30–02.00 approx.) a=Belongs to RCN. St's printed in fat type are in México City.

	Call	kc	kW		Call	kc	kW		Call	kc	kW
16)	WA	540	150	85)	SU	790	1D	137)	FM	1010	1/0.2
27)	KL	550	1/0.25	86)	VA	a790	5/0.2	138)	HL	1010	10/5
28)	QW	a550	2/0.2	87)	AN	800	1D	139)	DX	a1010	1
29)	UC	550	1/0.25	88)	LO	800	150	140)	TX	1010	1/0.25
30)	OC	560	1.5/1	89)	FW	a810	50/30D	141)	VK	1010	5/0.1
31)	BJB	570	5/0.25	90)	UX	810	5D	142)	WS	1010	5/0.25
32)	LQ	570	1	91)	BA	a820	1	143)	XL	1020	1D
33)	NZ	570	1/0.25	92)	LA	830	10/5D	83)	QR	1030	10/1
34)	OA	a570	5/0.25	93)	FG	840	1D	144)	D	1050	10
35)	TJ	570	1/0.1	94)	TQ	850	10D	145)	G	1050	150
36)	VX	570	1/0.25	95)	M	a850	5	17)	DP	°1060	50d
37)	AV	580	5/1	96)	ZR	850	1D	146)	GY	1070	1/0.25
38)	DZ	580	1/0.45	72)	MIA	850	1D	147)	IT	1070	1/0.25
39)	FI	580	5/0.25	12)	US	°850	1	148)	SP	1070	5/1
40)	HP	580	1/0.25	97)	AL	860	1D	149)	OD	1090	1D
41)	MU	580	5/0.25	98)	DU	a860	1/0.5	150)	RB	1090	50d
42)	UE	a580	5	99)	MO	860	5	151)	WL	1090	2.5D
43)	E	590	1/0.15	100)	NW	860	1/0.25	152)	LEO	a1110	5
44)	FD	590	5/0.25	21)	UN	°860	45/25	153)	OQ	a1110	1D
45)	HQ	590	1/0.5	101)	EM	880	1D	16)	CN	°a1110	50d
6)	PH	°590	5	102)	TZ	880	1	154)	TR	1120	1D
46)	BB	a600	5/1	16)	W	°900	250	155)	MR	1140	1/0.5
47)	DN	600	1	16)	WB	900	5	156)	RM	1150	1/0.5
48)	Z	a600	2	103)	HO	910	1/0.25	157)	GE	a1150	1D
49)	BX	610	5/0.5	7)	U	°920	5/0.5	83)	JP	1150	10d
50)	CV	a610	1/0.25	24)	BH	°920	5/1	158)	JS	1150	1/0.5
51)	EL	610	1/0.15	104)	BM	920	5/1	159)	RM	1150	1/0.5
52)	GS	610	1/0.5	105)	CQ	a920	1/0.1	160)	XZ	a1150	1/0.2
53)	JA	610	1/0.5	106)	MJ	920	1/0.25	162)	RT	1170	5D
54)	KZ	a610	1/0.5	107)	OK	920	1/0.25	163)	IT	a1170	1/0.25
55)	UF	610	5/1	108)	QD	920	1D	164)	FR	1180	1/0.25
56)	BU	620	5/0.25	22)	Q	°940	50	165)	JET	1190	1
57)	CK	620	1/0.1	109)	WV	940	1D	166)	PZ	a1190	1D
58)	NK	620	10	110)	GM	950	3/2.5d	167)	ZI	1200	1D
59)	OO	620	1/0.25	111)	YJ	950	1/0.1	22)	B	°1220	100
60)	ACA	630	5/0.25	112)	K	a960	5/1	168)	S	1240	1/0.25
61)	FB	630	5/1D	113)	CS	960	1/0.1	169)	BN	1240	1/0.25
62)	FU	630	2/0.75	114)	GB	960	1/0.5	170)	BQ	1240	1/0.25
4)	JB	°630	0.5	115)	HK	960	1/0.25	171)	LD	a1240	1/0.1
63)	RPS	630	1/0.25	116)	OZ	960	1/0.25	172)	LM	1240	1/0.25
13)	TS	°630	1/0.5	117)	IQ	a960	1/0.1	11)	MQ	°1240	1/0.25
64)	ZM	650	5	118)	KS	a960	0.5/0.1	173)	RZ	1240	1/0.25
65)	RPM	660	10/5	119)	ROO	a960	1/0.5	174)	ZX	1240	1/0.2
66)	FJ	680	1/0.1	120)	J	a970	10/5	175)	DK	1250	5/1
67)	KQ	a680	5/0.5	121	O	970	1	176)	DL	a1250	1/0.5
68)	LG	680	10/5	122)	CJ	970	1	177)	JX	1250	1/0.1
69)	ORO	680	1	123)	MH	970	1/0.1	178)	PI	1250	1/0.1
70)	N	690	20/5	22)	DF	°970	10/5D	179)	SJ	1250	1/0.5
71)	TRA	690	50D	124)	OW	970	1/0.25	19)	TF	°1250	0.5
72)	AR	700	1D	36)	VT	970	5/0.4	180)	L	1260	10/1
73)	BL	710	5/0.25	125)	UG	970	0.5D	11)	MH	1260	1/0.5
23)	MP	°710	1/0.5	126)	KE	980	1/0.25	181)	R	1260	1/0.25
74)	ON	710	2/1	127)	LC	980	5/0.2	182)	ME	1260	1/0.25
75)	RL	710	1/0.2	128)	NR	a980	5/0.5	183)	OG	1260	1/0.15
9)	X	°730	50	129)	TU	980	10/1	184)	AX	1270	5/0.5
77)	ZZ	760	5D	130)	XT	a980	1	185)	MW	1270	1D
78)	ABC	760	5	131)	T	990	50d	186)	NY	1270	1/0.25
79)	BI	790	1/0.25	132)	RC	990	1/0.1	187)	PV	1270	1/0.25
80)	FE	790	1/0.5	133)	CL	990	5	188)	ZU	1270	1/0.25
81)	GZ	790	1/0.25	134)	HZ	990	1/0.25	189)	AG	1280	1
82)	NT	790	5/0.75	135)	HU	a1000	5/0.1	190)	AW	1280	5/0.5
83)	RC	790	10/1	136)	FV	1000	1D	191)	BW	1280	1/0.6
84)	RPC	790	5/0.4	6)	OY	°1000	10	194)	AP	1290	1/0.1

	Call	kc	kW
20)	DA	1290	10/1
195)	JL	1300	1/0.25
197)	LE	1300	1/0.15
198)	SW	1300	1D
199)	XW	1300	1/0.1
200)	AM	1310	1/0.25
201)	BP	1310	5/0.25
202)	FH	1310	1D
203)	HV	1310	1
204)	PO	a1310	1/0.25
15)	RU	°1310	1/0.25
138)	TIA	1310	1/0.25
83)	**AI**	**1320**	**10/1**
206)	RJ	a1320	1/0.5
207)	UH	1320	1/0.1
208)	UI	1320	1/0.5
209)	BO	1330	1D
210)	FC	1330	1
211)	RP	1330	1/0.1
212)	WQ	1330	1D
214)	JK	1340	1/0.25
215)	DKT	1340	1/0.25
31)	NV	1340	1/0.25
217)	OE	1340	1
218)	OM	1340	1/0.25
116)	OZ	1340	1/0.25
20)	QK	°1350	1
220)	TB	1350	5/0.5
221)	TM	a1350	1
222)	Y	1360	1/0.17
223)	DQ	1360	1/0.1
225)	OL	1360	1/0.15
226)	SA	1360	1/0.5
227)	A	1370	1
228)	HF	1370	5
229)	PA	a1370	5/0.25
230)	XL	1370	10/0.1
6)	CO	1380	5
231)	GW	1380	1/0.175
232)	RK	1380	1/0.5
233)	OR	1390	1
234)	TL	1390	5/1
235)	GD	1400	1/0.2
236)	I	1400	1/0.25
237)	TO	1400	1/0.25
238)	NG	1400	1/0.2
239)	TY	1400	5/0.2
240)	VV	1400	1/0.15
241)	XB	1400	10
242)	AS	1410	1/0.25
156)	BF	1410	1/0.25
6)	BS	°1410	5/1
243)	CF	1410	1/0.5
224)	TAB	1410	5/0.5
148)	SP	1410	1
244)	XJ	1410	1/0.5
245)	F	1420	5/0.5
246)	H	1420	1
247)	EW	1420	1D
11)	UP	1420	
248)	WE	1420	5/0.17
249)	WJ	1420	1/0.25
250)	XX	1420	2
251)	CZ	1430	1/0.25
252)	IG	a1430	1/0.1
253)	LL	1430	1/0.25
254)	LY	1430	1D
255)	OX	1430	5/0.5
256)	WD	1430	2/0.15
83)	LZ	1440	5/1
10)	CM	a1450	1/0.25
257)	GC	a1450	1
259)	JD	1450	1/0.25
261)	NA	1450	1/0.5
262)	PP	1450	1/0.25
11)	PY	1450	
263)	VH	1450	1/0.25
255)	HX	1460	1/0.25
264)	JT	1460	1D
265)	LX	1460	10D
8)	XQ	°1460	0.25
266)	YC	1460	1
267)	BBC	1470	5
213)	CU	a1470	1
268)	DS	1470	1/0.2
269)	HI	1470	1/0.25
270)	SM	1470	10/5
272)	YA	a1470	1
273)	HM	1380	1D
274)	PR	1480	10/0.5
275)	AL	1490	1
276)	DR	1490	1/0.25
277)	ED	1490	1/0.25
278)	FF	1490	1/0.25
279)	GT	1490	1/0.25
281)	TAA	1490	1/0.2
282)	VZ	1490	1/0.2a
283)	BG	a1500	1
25)	RH	°1500	20D
284)	SD	a1530	1D
6)	UR	1530	5
222)	NC	1540	1/0.25
285)	BG	a1550	5
286)	NU	1550	5D
287)	ZL	1550	10
288)	RMK	1560	1/0.5
289)	RX	1560	1/0.25
290)	RF	1570	250
291)	DM	1580	50
292)	LI	a1580	1/0.25
293)	NQ	1580	1/0.5
294)	QL	a1580	1/0.2
255)	NH	1590	1/0.2
26)	VOZ	°1590	10/5
295)	BZ	a1590	1D
296)	KB	1590	1/0.15
297)	AE	a1600	50

+ 148 stations less 1kW not mentioned.

PRINCIPAL BROADCASTING NETWORKS

A) Radio Programas de Mexico (with 73 affiliated st's) – **ADDR:** Bucareli 109, 4° piso, México, DF – **Te:** 464972. **Telex:** 017815 – **L.P:** Pres: C. Serna Martinez. Gen. Mgr: A. Eufracio O. Dir. Tec: S. Pang B. Dir. Prgr: H. G. Rivera.

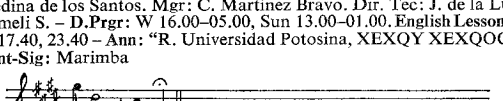
Owned and operated st's: XEX, México City (with all sw, FM and rel. st's); XERPM 660kc, México City; XEDK 1250kc, Guadalajara, Jal; XEMR 1140kc, XENL 860kc, XENJ 1480kc Monterrey, NL; XER 1260kc Linares, NL; XEVM 960kc Montemorelos, NL.

B) Radio Cadena Nacional (with 65 affiliated st's) – **ADDR:** Vallarta 1,6° piso México, 4, DF. **Te:** 469648 – **L.P:** Dir. Gen: R. Cutberto Navarro. Dir. Tec: E. Diaz G. – **Key st:** XERCN 1110kc. México City. Other st's: XEACM 1110kc, Campeche, XELEO 1110kc León – **D.Prgr:** All st's 12.00–06.00 – **V.** Reports not wanted.

The Mexican Gov. requires all st's to carry "La Hora Nacional del Gobierno Méxicano" every Mon 04.00–05.00.

Short Waves:

1) Dirección General de Educ. del Estado Chilpancingo, Guerrero.
2) Sria de Educación Pública, Dirección de Asuntos Indigenas, Sección Administrativa, México DF (tr. at Semachique, Chih.).
3) Av. Cerro de los Torres 395, México 21, DF. **Te:** 49-35-00. **Cable:** Uni-Bero – **L.P:** Dir. Gen: F. Xavier Mena Ortiz. Dir. Tec: D. Chavez Meneses[3] **Ann:** "XEJN-OC Cultural, Huayacocatla, Ver".
4) Gobierno del Estado de Jalisco, Casa de la Cultura, Guadalajara, **L.P:** Dir. Gen: F. R. González, Dir. Tec: E. Beas.
5) Zaragoza 84, México, DF (Tr. at Sisoguichi, Chih).
6) Insurgentes Sur 1870, México, DF. **L.P:** Dir. Gen: E. Guillermo Salas. Gen. Mgr: C. Flores. Dir. Adm: M. Martinez R – **D.Prgr:** mw 24 h. N: Every h on the h – **Ann:** "R. Mil, música para todos los gustos". – **V.** by QSL-card or letter.
7) Av. Independencia 230, Veracruz, Ver – **L.P:** Dir. Gen: F. Pazos S. Dir. Tec: F. Pazos de la Torre – **Ann:** "El Eco de Sotavento desde Veracruz" – **V.** by letter. **Re.** in Sp, E.
8) Apt. Postal 456, San Luis Potosi. **Te:** 2-52-52 – **L.P:** Dir. Gen: G. Medina de los Santos. Mgr: C. Martinez Bravo. Dir. Tec: J. de la Luz Lomeli S. – **D.Prgr:** W 16.00–05.00, Sun 13.00–01.00. **English Lessons:** W 17.40, 23.40 – **Ann:** "R. Universidad Potosina, XEXQY XEXQOC" – **Int-Sig:** Marimba



V. by letter. Recordings accepted. **Pub:** Prgr. schedule free.

9) Rio de la Loza 196, México, DF – **L.P:** Dir. Gen: M. O'Farrill. Dir. Tec: Ing. F. Solis – XEX rel. st's (all on 730kc): León (Gto) 100/50kW, Veracruz (Ver) 1kW and 5 st's of 0.5kW at Monterrey (NL), Saltillo (Coah), Torreon (Coah), Guadalajara (Jal), San Luis Potosi (SLP) – **D.Prgr:** 12.00–06.00. **N:** 12.30, 12.55, 20.30, 05.00, 05.55; W 14.00, 17.00; Thurs–Sun 00.30, 01.00; Thurs–Sat 04.15; also every 15 min (short bulletins) – **Ann:** "Desde México, XEX en el 730 de su radio, canal internacional y sus estaciones en León, Veracruz, Monterrey, Saltillo, Torreon, Guadalajara y San Luis Potosi" – **V.** by QSL-card or letter.
10) Apt. Postal 79, Ci. Mante, Tams – **L.P:** Dir. Gen: R. Lopez Mendez. Dir. Tec: L. Fernandez C – **Ann:** "Escuchan ustedes a XECM onda larga y XECMT onda corta, operando por una vida mejor en el campo de México transmitiendo simultaneamente desde Ciudad Mante, Tamaulipas, México" – **V.** by letter.
11) Apt. Postal 217, Merida, Yuc – **Te:** 4071 – **L.P:** Dir. Gen: R. Dominguez L. Dir. Tec: H. Padron M – **N:** Every h on the h – **V.** by letter – XEMH: R. Merida, Ca. 58 No. 493, Merida Yuc. – XEUP: R. Tizimin. XEPY: R. Armonia.
12) Universidad de Sonora, Hermosillo, Son. **Te:** 36950 – **L.P:** Dir. Gen: Ing. M. R. Canale. Dir. Prgrs: H. Estavillo M – **Ann:** Sp: "Esta es R. Universidad de Sonora, transmitiendo a través de sus estaciones XEUS y XEUDS desde la Universidad de Sonora, en Hermosillo, Sonora, México". E: "This is R. University of Sonora, broadc. on 850 and 6115kc through its st's XEUS and XEUDS from the campus of the University of Sonora, at the city of Hermosillo, State of Sonora, Republic of Mexico" – **V.** by QSL-card & letter. Recordings accepted.
13) Apt. 57, Tapachula. **Te:** 1836 – **L.P:** Dir. C. Lopez A. Dir. Tec: R. Marin. **V.** by QSL-card. Recordings accepted.
14) Apt. Postal 7892, México, DF – **L.P:** Dir. Gen: R. Cutberto Navarro. Mgr: E. Nassar Jr. Dir. Tec: E. Diaz G – **D.Prgr:** 11.00–06.00. **N:** every 5 min. before the h – **Ann:** "Aqui México...XERCN, Estación Piloto de R. Cadena Nacional..." – **V.** by letter.
15) Domicilio Conocido, Chihuahua, Chih.
16) Cadena Radiodif. Mexicana, S. A, Ayuntamiento 52, México, DF. **Te:** 181220 – **L.P:** Dir. Gen: B. Sancristobal. Dir. Tec: J. Zepeda. Dir. Prgr: R. Cardona – **D.Prgr:** 11.50–05.15 on 900/6165/9515kc. Relay st: XEWA, XEWB, XEWK, XEWA: 11.50–05.00. **N:** 12.30, 13.35, 14.00, 14.45, 19.30, 20.30, 01.40, 04.20, 04.25, 05.30, 06.00. – **Ann:** "XEW y XEWW, La Voz de la America Latina desde México" – **V.** by letter.
17) Ca. de Bucareli, México, DF (inactive both sw and mw).
18) Instituto Federal de Capacitación del Magisterio, Dr. Jimenez 244, México, DF.
19) Apt. Postal 74, Veracruz, Ver. **Te:** 2-22-50 – **L.P:** Dir. Gen: J. de Dios Rodriguez D. Dir. Tec: L. Martinez – **N:** 13.15, 14.55, 03.15 and 5 min. before each h to 05.55 – **Ann:** "La Voz de Veracruz" – **V.** by QSL-card.
20) Tiber 100,9° piso, México 5, DF. **Te:** 110814 – **L.P:** Dir. Gen: G. Morales B. Dir. Tec: F. Gomez B – **D.Prgr:** 24 h – **Ann:** "XEQK – Emisoras de la Hora Exacta del Observatorio Astronomico Nacional". – **V.** by letter. **Re.** in Sp, E, G, F. Recordings accepted.
21) Oficinas Técnicas, Ci. Universitaria, Mexico 20, DF. **Te:** 281157 – **L.P:** Dir. Gen: J. Gutierrez H. Dir. Tec: O. Velazquez. Dir. Prgr: R. Lopez M. **L.L:** 16.00 (French), 01.00 (English) – **Ann:** "Esta es R. Universitaria Nacional de México transmitiendo simultaneamente en 860kc onda larga, 9600kc onda corta, y 96.1Mc de FM". – **V.** by letter. Recordings accepted.
22) Dr. Rio de la Loza 182, 2° piso, México, DF. **Te:** 18-52-00. **L.P:** Dir. Gen: D. Pastrana D. **D.Prgr:** XEB/XEQ/XEDF (mw): 12.36–09.16. **N:** Every h on the h; on XEQ special music and news prgr. at 05.00–06.00 – **Ann:** On XEB: "En el 1220 de su radio, esta es XEB" or "Desde México, XEB en el 1220 de su radio, canal libre internacional". On XEQ: "XEQ desde México" – **V.** by QSL-card or letter.
23) Quemada 40, México, DF.
24) P.O. Box 68, Hermosillo, Son – **L.P:** J. R. Agraz N – **N:** Every h on the h – **Ann:** "XEBH, El Heraldo de Sonora desde Hermosillo" – **V.** by letter.
25) A.R.S.E. S.A. Quemada 40, Col. Narvarte, México, DF – **L.P:** Mgr: H. Fernandez L. – **N:** 13.31, 20.45, 00.15, 04.00.
26) Paseo de la Reforma 174, 90 Piso. México, DF.

Medium Waves:

27) **R. XEKL**, Zamora, 12, Jalapa, Ver – 28) **R. Mexicana de Mérida**, Ca. 64, No. 526, Mérida, Yuc – 29) **R. XEUC**, Hidalgo 19, Tehuantepec Oax – 30) **R. XEOC**, Av. Chapultec 471, México, DF.
31) **R. Fiesta (XEBJB) & R. Alegria (XENV)**, Ave. Madero Ote. 111A, Monterrey, NL.
32) **R. XELQ**, Morelos Nte 68, Morelia, Mich – 33) **R. Impulsora de Culiacán**, Blvd. 50, Oriente, Culiacan, Sin.
34) **R. Oaxaca**, C. Bustamente 17, Oaxaca – 35) **R. XETJ**, Av. Lerdo de Tejada 1564, Torreón, Coah – 36) **R. XEVT/XEVX**, XEVT: Zaragoza Sur 3, Villahermosa, Tabasco; XEVX: Morelos 58, Comalcalco.
37) **R. Guadalajara**, Av. Vallarta 1458, Guadalajara, Jal.
38) **R. XEDZ**, Av. 3 No. 551, Cordoba, Ver – 39) **Pregonero del Edo de Chihuahua**, Libertad 1302, Chihuahua.

40) **R. XEPH**, Ca. 14 No. 150, Ci. Victoria, Tams – 41) **R. XEMU**, Carranza 3, Piedras Negra, Coah. – 42) **La Voz de Chipas**, Ca. Central 5, Tuxtla Gutiérez, Chis – 43) **R. XEE**, 20 de Noviembre 122, Pte. Durango, Dgo – 44) **R. XEFD**, Carretera a Matamoros, Rio Bravo, Tams – 45) **R. Hermosillo**, Rosales y Vildesolda, Hermosillo, Son – 46) **R. Acapulco**, Morelos 3, Acapulco, Gro – 47) **R. Dif. del Norte**, Av. Juárez 1465, Pte. Torreón, Coah – 48) **La Voz de la Peninsula**, Ca. 56 No. 508, Merida, Yuc – 49) **R. Coahuila**, Av. Carranza 164, Sabinas, Coah.

50) **R. XEXV**, *Francisco I, Madero 35*, Ci. Valles, **S.L.P.** – 51) **R. Dif. XEEL**, T. Larrey 4, Fresnillo, Zacatecas. – 52) **R. Guasave**, Zaragosa 45, Guasave, Sin – 53) **R. XEJA**, Pasaje Tanos, Ca. Enriques, Jalapa, Ver – 54) **La Voz del Istmo Tehuantepec**, D. Conocido, Tehuantepec, Oax – 55) **R. XEUF**, Portal Carillo 8, Edif. Silva, Uruapan, Mich – 56) **R. XEBU**, V. Carranza 1816–18, Chihuahua, Chih – 57) **R. Dif. XECK**, 20 de Noviembre y Victoria, Durango, Dgo – 58) **R. 620**, Balderas 32, México, DF. **L.P:** Dir. Gen: V. Blanco R. **D.Prgr:** 13.00–06.00 – 59) **R. XEOO**, Lerdo 197, Pte. Tepic, Nayarit – 60) **R. Pacifico**, Acapulco, Gro.

61) **Emis. Incorporadas de Monterrey**, 5 de Mayo 119, Monterrey, NL. **D.Prgr:** 12.00–16.00. **N:** Every half h – 62) **R. XEFU**, Hidalgo 36, Cosamaloapan, Ver – 63) **R. Ranchito**, A. Flores 362, Mazatlán, Sin. **L.P:** Dir: L. Pantoja P. – 64) **La Voz del Comercio de Zamora**, 5 de Mayo 730, Zamora, Mich – 65) **R. XERPM**, Dr. Rio de la Loza 56, México, DF – 66) **R. XEFJ**, B. Juárez 86, Teziutlan, Pue – 67) **R. Soconusco**, Parque Infantil, Tapachula, Chipas – 68) **R. Impulsora del Centro**, Paseo de los Insurgentes 1, Léon, Gto – 69) **R. XEORO**, Apt. Postal 61, Guasave, Sin.

70) **R. XEN**, Zacatecas 229, Condom, Yucatan, México DF – 71) **R. del Pacifico**, Esq. Lerma y Bravo, Tijuana – 72) **R. XEAR** (Zapopan) & **XEMIA** (Chalapa), Ave. Colon 115, Guadalajara, Jal. **D.Prgr: N:** every half h – 73) **R. Dif. XEBL**, Blvd. 5 Febrero 50, Culiacán, Sin – 74) **R. XEON**, Av. Norte 2, Tuxtla, Gutierréz, Chis.

75) **La Voz Costena desde Colima**, 27 de Septiembre 328, Colima.

77) **R. XEZZ** Av. Juárez 595-2, Guadalajara – 78) **R. fónica de México, S.A**, Plaza de los Ferrocarriles 5, México, DF – 79) **R. XEBI**, Madero 310, Aguascalientes, Ags.

80) **R. XEFE**, Aldama 2611, Nuevo Laredo, Tams – 81) **R. XEGZ**, Apt. Postal 6, Ci. Lerdo, Dgo – 82) **R. XENT**, Apt. 105, La Paz, BC.

83) Articulo 123, No. 90. México, DF. **XERC: R.** Popular de México. **XEQR:** Corporación Mexicana de Radio. **XEPJ: R.** América. **XEAI: R.** Aeropuerto. **XELZ: R.** Variedades. **D.Prgr:** 12.30–08.30.

84) **R. TV Parral**, Hotel Victoria, Chihuahua, Chih – 85) **R. XESU**, Edif. Bertha, desp. 222, Mexicali, BC. **D.Prgr:** 05.00–17.00.

86) **R. Tabasco**, Av. *Pino Suarez 24A, Villahermosa*, Tab – 87) **R. Ocotlán**, Madero 42, Ocotlán, Jal – 88) **R. Dif. Continental**, Mérida 1155, Ci. Juarez, Chih – 89) **R. XEFW**, Madero 416, Ote. Tampico, Tams. **L.P:** Dir: V. Florest. **D.Prgr:** 12.00–04.00.

90) **R. XEUX**, Hidalgo y Progeso, Tuxpan, Nayarit – 91) **R. Fortin**, Apt. Postal 4, Fortin de las Flores – 92) **R. Metropolitan**, Paseo de la Reforma 139, México, DF – 93) **R. Dif. XEFG**, Independencia y Madero, Cely, Gunajuato. **L.P:** Dir: R. Olivares G – 94) **R. XETO**, Oriente 4 No. 5-B, Orizaba, Ver – 95) **R. XEM**, Independencia 1211, Chihuahua, Chih – 96) **R. XEZR**, Matamoros 18, Zaragoza, Coah – 97) **R. Dif. XEAL, N.** Heroes 670, Manzamillo, Col – 98) **R. XEDU**, 20 de Noviembre 105, Pte. Durango, Dgo – 99) **R.XEMO**, Durango 10, Tijuana BC.

100) **R. XENW**, Matamoros 14, Culiacán, Sin – 101) **R. Dif. XEEM**, Aldama 55, Rio Verde, S.L.P. – 102) **R. XETZ**, Tequila, Jal – 103) **R. XEHO**, No Reelección 224, Ci. Obregon, Son – 104) **R. XEBM**, Jardin Hidalgo 15, San Luis Potosi, S.L.P – 105) **R. Culiacán**, Escobedo 226, Pte. Culiacán, Sin – 106) **R. XEMJ**, Zaragoza Sur 607, Piedras Negras, Coah – 107) **R. XEOK**, Xicotencatl 1051, Monterrey, NL – 108) **R. Dif. XEQD**, Ca. Victoria 319, Chihuahua, Chih – 109) **R. XEWV**, Av. Madero 420, Mexicali, BC.

110) **R. XEGM**, Av. "G" 185, Tijuana, BC – 111) **Televisión Nortena**, Apt. Postal 16, Nueva Rosita, Coah – 112) **El Pregonero del Bravo**, Dr. Mier 2223, Nueva Laredo, Tam. **D.Prgr:** W 12.00–06.00, Sun 14.00–20.00. V. by letter – 113) **R. XECS**, Zaragoza y Allende Manzanillo, Col – 114) **R. XEGB**, 3a Hidalgo 37, Coatzacoalcos, Ver – 115) **R. XEHK**, P. Moreno 315, Desp. 203–205, Guadalajara, Jal – 116) **R. Dif. XEOZ**, Paseja Enriques Local F, Jalapa, Ver – 117) **R. XEIQ**, Sinaloa 418 Sur, Ci. Obregon, Son – 118) **R. XEKS**, A. Zaragoza Lado Nte, Saltillo, Coah – 119) **R. Dif. XEROO**, La Voz de Quintana Roo, Chetumal, Quintana Roo – 120) **Mexican Broadc. Co**, Constitución 402, Ci. Juárez, Chih – 121) **R. El Callo**, Ca. Novena 95 entre Bravo y Bustamente, Matamoros, Tams – 122) **R. XEJC**, Apt. Postal 106, Apatzingan, Mich. – 123) **R. Mérida**, Ca. 62 No. 526, Mérida, Yuc – 124) **R. XEOW**, L. Valle y Aquiles Serdan, Mazatlán, Sin – 125) **Univ. de Guanajuato**, Guanajuato, Gto – 126) **R. Navojoa**, Morelos y Toledo, Navojoa, Son – 127) **R. XELC**, Av. Madero 116, La Piedad.

128) **R. XENR**, Juárez 6, Altos, Nueva Rosita, Coah – 129) **Impulsora Moderna Del Radio**, Ca. Muelle y S. Diaz, Tampico, Tams.

130) **Radiófonica de Nayarit**, Veracruz Nte 125, Tepic, Nay – 131) **El Pregonero del Norte**, 15 de Mayo Ote 650, Monterrey, NL. **L.P:** Pres: A. Garza. L. Gen. Mgr: Lic. L. Gutierrez N. **D.Prgr:** XET: 12.00–06.00, XEJM: 13.00–05.00. **N:** every half h – 132) **R. Ciudad Guzmán**, Artes 53 y 57, Ci. Guzmán, Jal – 133) **R. XECL**, Av. Madero 621, Mexicali, BC – 134) **R. Dif. XEHZ**, Carret Transpeninzular Km 5, La Paz, BC – 135) **R. Tropical**, Detrás Fortaleza Militar, Mtz. de la Torre, Ver – 136) **R. Dif. XEFV**, Maxtla 519, Ci. Juaréz, Chih – 137) **R. XEFM**, J. B. Lobos 51, Veracruz, Ver – 138) Sector Hidalgo, Ca. 10 No. 183, Guadalajara – 139) **R. XEDZ**, Ensenada, BC.

140) **R. Casas Grande**, Av. P. Diaz y Minerva 400, Nuevo Casa Grandes, Chih – 141) **Emisoras de Torreón**, Av. Juaréz 1465, Torreón. Coah – 142) **R. XEWS**, *Rubi 57, Nte, Depto. 1, Culiacán*, Sin – 143) **R. Dif. XEXL**, Portal Artega 2, Patzcuaro, Mich – 144) **R. XED**, Edif. Bertha, desp. 222, Mexicali, BC – 145) **La Voz de Norteamérica**, Hidalgo 426, Ote. Monterrey, NL. **D.Prgr:** 24 h. **English:** 00.30–12.00 – 146) **R. Tehuacán**, Av. Libertad 113-A, Tehuacán, Pue – 147) **R. Dif. XEIT**, Av. Ultimo Paseo y Ca. 43, Ci. del Carmen, Campeche – 148) **R. Impulsora de Occidente**, Av. 16 de Septiembre 520, Guadalajara, Jal – 149) **R. Juventud**, Edif. Loteria Nacional, Desp. 401, Veracruz, Ver. 150) **Interamericana de Radio**, Edif. Calif. desp. 2, Tijuana, BC – 151) **R. Laredo**, Matamoros y P. Suárez, Nuevo Laredo, Tams – 152) **R. Sistema del Bajio**, León, Gto – 153) **R. Dif. XEOQ**, Apt. Postal 301, Rio Bravo, Tams – 154) **R. XETR**, Laredo 29 Sur, Ci. Valles, S.L.P – 155) **Propulsora del Radio**, Madero y Venustiano Carranza, Monterrey, NL – 156) **R. Dif. XEBE**, Av. Hidalgo Pte. 309, San Pedro de las Colónias, Coah – 157) **R. Comercial de Baja California**, Ley de Alfabetizacion 257, Mexicali, BC – 158) **R. XEJS**, Colegio 14, Hidalgo del Parral, Chih – 159) **R. XERM**, Mexicali, 160) **La Voz de Zacatecas**, Miguel Auza 8, Zacatecas F – 162) **R. Televisora Siglo XX**, Apt. Postal 52, Reynosa, Tams – 163) **R. Carmen**, Av. Ultimo Paseo y Ca. 43, Ci. Carmen, Cam – 164) **R. XEFR**, Col. Viaducto, Piedad, Mexico, DF – 165) **R. Triunfo**, Villa de Guadalupe, NL – 166) **R. Dif. XEPZ**, Ci. Juarez, Chih – 167) **R. Dif. XEZI**, Apt. Postal 16, Zacapu, Mich. – 168) **R. Televisora de Tampico**, Diaz Miron 310, Tampico, Tams – 169) **R. Delicias**, Av. 4a y Ca. 4a Norte, Ci. Delicias, Chih.

170) **R. XEBQ**, Av. Serdan y Ca. 22, Guaymas, Son – 171) **R. XELD**, Cerret, Guadalajara-Barra de Navidad Km 189, Autlan de Navarro, Jal – 172) **R. XELM**, Tuxtla, Gutiérrez, Chis – 173) **R. Televisora del Bajio**, Edif. "Sears", León, Gto – 174) **R. XEZX**, Tenosique, Tab – 175) **R. Televisora de Jalisco**, 16 de Septiembre 456, Guadalajara, Jal. V. by letter. Rp – 176) **R. XEDL**, Angel Flores 26, Ptes, Hermosillo, Son – 177) **R. Emis. Querétana**, Av. Zaragoza Pte. 15, Queretaro, Qro – 178) **R. XEPI**, Carretera Chilapa y Las Frondas, Tixtla, Gro. – 179) **R. Saltillo**, M. Acuna Sur 102, "C", Saltillo, Coah – 180) **R. Impulsora Herdez**, Av. Reforma 400, Desp. 701, México, DF. **D.Prgr:** 24 h. **English:** 13.00, 02.00, 04.00 – 181) **R. Linares**, Carretera Nacional México Laredo, Linares – 182) **R. XEMF**, Zaragoza 158, Monclova, Coah – 183) **R. Dif. XEOG**, Libertad 1302 altos, Chihuahua, Chih – 184) **R. XEAX**, Av. M. Garcia Vigil 5, Oaxaxa, Oax – 185) **R. Dif. XEMW**, Apt. Postal 1203, San Luis Rio Colorado, Son – 186) **R. XENY**, Campillo y Fenichio, Nogales, Son – 187) **R. XEPV**, Mina 1, Papantla de Olarte, Ver – 188) **Promotores de Radio**, Madero 15, Zacapu, Mich – 189) **R. XEAG**, Av. Uno 590, Córdoba.

190) **R. XEAW**, Parioutin 316, Monterrey, NL. **D.Prgr: N:** Every half h – 191) **R. Emis. del Norte**, Av. V. Carranza 514, Chihuahua, Chih – 194) **R. XEAP**, Sinaloa 206, Ci. Obregón, Son – 195) **R. XEJL**, Independencia 27, Guamuchil, Sin – 197) **R. XELE**, Muelle 304, Sur, Tampico, Tams – 198) **R. Dif. XESW**, Carret Madera, Ci. Madera, Chih – 199) **R. XEXW**, Obregón 51, Nogales.

200) **R. XEAM**, Carretera Matamoros, Victoria, Matamoros, Tams – 201) **La Voz de la Laguna**, Cepeda Sur 409, Torreón, Coah – 202) **R. XEFH**, Ca. 5a y Av. Panamericana, Agua Prieta, Son – 203) **R. XEHV**, Edif. Virginia, Desp. 4 y 5, Veracruz, Ver – 204) **Ondas Populares**, V. Carranza 4-A, San Luis Potosi – 206) **R. Mazatlan**, M. Escobedo y B. Dominguez, Mazatlan, Sin – 207) **R. XEUH**, Tuxtepec, Oax – 208) **R. XEUI**, Hotel Los Lagos, Comitan, Chis – 209) **R. XEBO**, Morelos y 5 de Mayo, Irapuato, Gto.

210) **R. XEFC**, Ca. 64 No. 498, Merida, Yuc – 211) **R. XERP**, A. Obregón y 2 de Enero, Ci. Madero, Tams – 212) **R. XEWQ**, Hidalgo 229, Nte. Monclovia, Coah – 214) **La Voz de Delicias**, Av. Agricultura y Ca. 4a No. 605, Delicias, Chih – 215) **R. XEDKT**, L. Cotilla 769, Guadalajara, Jal – 217) **R. XEOE**, Tapachula, Chis – 218) **R. XEOM**, Zaragoza y Corregidora, Coatzacoales, Ver – 220) **R. Laguna**, Apt. 225, Torreón, Coah – 221) **R. XETM**. Av. Fco. I. Madero 26, Naco, Son – 222) **R. XEY/XENC**, Tres Guerras 44, Celaya, Gto – 223) **R. XEDQ**, Constitucion 7, S. Anorés, Tuxtla, Ver – 224) **R. XEKF**, Altamirano 21, Iguala, Gro – 225) **R. XEOL**, Teziutlán, Pue – 226) **La Voz de Sinaloa**, M. Escobedo Pte 65, Culiacán, Sin – 227) **R. XEA**, Ca. 12 No 110, Campeche, Cam – 228) **R. Com. Sonorense**, Ca. Elias 10, Nogales, Son. V. by QSL-card – 229) **R. Dif. XEPA**, Ca. 7 Pte 102, Puebla, Pue. – 230) **R. XEXL**, Lote 14, Colonia Morelos, Patzcuaro, Mich – 231) **R. XEGW**, 13 Hidalgo y Juárez, Ci. Victoria, Tams – 232) **R. XERK**, Av. México 224, Nte, Tepic, Nay – 233) **R. El Callo**, P. J. Mendéz 154 Ote, Reynosa, Tams. – 234) **R. XETL**, Av. Morelos 3, Tuxpan, Ver. – 235) **R. Dif. XEGD**, M. Herrera 79, Hidalgo del Parral Chih – 236) **R. XEI**, Portal Hidalgo 213, Morelia, Mich – 237) **R. Tiempo**, Emilio Carranza 320, Ote, Tampico, Tams – 238) **R. XENG.**

Moctezuma 2, Huauchinanga, Pue – 239) **R. XETY**, Ceror de Ortega, Tecoman. Col.
240) **R. XEVV**, Chiapa de Corzo, Chis – 241) **Universidad Veracruzana**, Domicilio Conocido, Jalapa, Ver – 242) **R. XEAS**, Mina 5037, Nuevo Laredo, Tams – 243) **La Voz del Valle del Fuerte**, Av. Obregón 581, Los Mochis, Sin. **L.P:** Dir: F. Pérez A – 244) **R. Televisora Tabascueña**, Av. Juárez 15, Villahermosa, Tal – 245) **R. XEF**, Pasaje R. Corona 2, Ci. Juarez, Chih – 246) **R. Monterrey**, 5 de Mayo 110, Monterrey, NL – 247) **R. XEEW**, Edif. Card. Galván, Matamoros.
248) **R. Irapuato**, Apt. Postal 118, Irapuato, Gto. – 249) **R. Dif. XEWJ**, Reforma 205-C, Tehuacan, Puebla.
250) **R. XEXX**, Revolución y Octava, Tijuana, BC – 251) **R. Mexicanas**, Jardin Hidalgo 16, San Luis Potosi – 252) **R. Dif. XEIG**, Aladama 14, Iguala, Gro – 253) **R. XELL**, Av. Independencia 231, Veracruz, Ver – 254) **R. XELY**, Morelos Nte 68, Morelia, Mich.
255) **R. XEOX**, Veracruz 63 Sur, Ci. Obregón, Son. **XEHX**: N. Héroes 219, Ci. Obregón. **XENH** (Tr. at Escuinapa, Sin).
256) **R. Dif. XEWD**, Ca. Sexta 702, Ci. Miguel Aleman, Tams. **L.P:** Dir: M. Becerra G – 257) **R. XEGC**, Constitución 165, Sahuayo, Mich – 259) **R. XEJD**, 20 de Noviembre 54, Poza Rica, Ver.
261) **R. Emis. Querétana**, Av. Zaragoza Pte 15, Querétaro, Qro – 262) **La Voz de Orizaba**, Poniente 7 No. 57, Orizaba, Ver – 263) **R. XEVH**, Ca. Hidalgo, Villa Hermoso, Tams – 264) **R. XEJT**, D. Mirón 106, Tampico, Tams – 265) **R. XELX**, Av. Revolucion 194, Zitacuaro, Mich. – 266) **R. XEYC**. Av. 16 de Septiembre, Ci. Juárez, Chih – 267) **R. XEAU**, Apt. Postal 111, Tijuana, BC – 268) **R. Colima**, Apt. 147, Colima. – 269) **R. Dif. XEHI**, Ca. Séptime 105, Ci Miguel Aleman, Tams.
270) **R. Dif. Con. XESM**, Rebsaman 241, Col. Narvarte, Mexico, DF – 272) **R. XEYA**, Irapuato, Gto – 273) **R. Dif. XEHM**, Ci. Delicias, Chih – 274) **Radiofonica de Poza Rica**, Ca. 6 Nte 2, Poza Rica – 275) **R. XEAL**, B. Dávalos 17, Mancanillo, Col – 276) **R. XEDR**, Av. Serdán 283, Altos, Guaymas, Son – 277) **R. Dif. XEED**, Grania "El Brillante" Ameca, Jal – 278) **R. Dif. XEFF**, J. de los Reyes 15, Matehuala, S.L.P – 279) **R. Zamora**, 5 de Mayo Sur, Zamora, Mich. **L.P:** Dir: M. A. Sánchez.
281) **R. Torreón**, A. Norte con N. Mendoza, Torreón, Coah.
282) **R. XEVZ**, Enriques 18, Acayucan, Ver – 283) **R. XEMS**, Ca. Abasolo 62, Matamoros, Tams – 284) **R. Dif. XESD** Bucareli 109, Mexico, D.F – 285) **R. XEBG**, Av. "C" 225, Altos, Tijuana, BC – 286) **R. XENU**, Av. Madero 2201, altos, Nuevo Laredo, Tams – 287) **R. XEZL**, Pasaje Revolución Local 5, Jalapa, Ver – 288) **R. XERMK**, Ci. Satelite, Est. de Mexico – 289) **R. XERX**, Morelos 104, Salamanca, Gto.
290) **Cia R. Dif. de Coahuila**, Camino a San Carlos, Ci. Acuña, Coah – 291) **R. Pacifico**, Matamoros, Hermosillo – 292) **La Voz del Sur**, Km 213, Carretera México-Acapulco, Chilpancingo, Gro – 293) **R. Tulancingo**, Av. Juárez Sur 200-3, Tulancingo, Hgo – 294) **R. XEQL**, Apt. Postal 40, Zamora, Mich – 295) **La Voz de Meoqui**, Av. 6a Nte. 402, Ci. Delicias, Chih – 296) **Promotriz Radiofonica**, Av. 16 de Septiembre 130, Guadalajara, Jal – 297) **R. XEAE**, Guerrero y Ocampo 450, Ci. Acuña, Coah.

NETHERLANDS ANTILLES

L.T: GMT−4 h – **Pr.L:** Papiamento, Dutch, English, Spanish, French, Portuguese.

CURACAO

GOVERNMENT RADIO & TELEGRAPH ADMINISTRATION
ADDR: P.O. Box 103, Curaçao. **Te:** 11500. **Cable:** "Gentel".
L.P: Ag. Dir: O. L. Labega.

RADIO CUROM (Foundation: "Curacaosche R. Vereeniging" – non profit foundation).
ADDR: P.O. Box 31, Willemstad, Curacao. **Te:** 12555. **Cable:** Curaver.
L.P: Pres: C. G. Grootens. St. Mgr: L. C. H. M. Bergman.
STATION (System: RCA): PJC-2 855kc 5kW.
HOME SCE: W 10.30–03.00. Sun 13.00–17.00, 20.00–03.00.
Dutch: 10.30–20.00 (Sun 13.00–17.00), 22.30–03.00. **N:** 11.00, 12.00, 14.30*, 16.30, 22.30**, 23.00, 02.00 – **Papiamento:** 20.00–22.30 (Sun 20.00–21.00). **N:** 16.00, 22.00 – * exc. Sat, ** Sun only.
ANN: "This is R. Curom in Willemstad, Curacao Neth. Antilles". Dutch: "Hier is de Curom te Willemstad op Curacao op een frequentie van 855kc perioden per sec. dat is 350.08 meter". Papiamento: "Aki ta Curom na Willemstad Corsouw riba su freq. di 855 kp. por sec. igual na 350.08 meter" – **INT-SIG:** Part of the Curom-march, played by a big band – **V.** by letter. **Rp.** – **FI:** by adv and donations of members

RADIO HOYER (Cultural, Comm.)
ADDR: Julianaplain 21, Willemstad. **Te:** 11673. **Cable:** Radioyer.
L.P: Dir. Gen: H. E. Hoyer.
STATIONS: PJC7-1 1010kc; PJC7-2 1500kc; PJB2 1385kc (all 1kW).
HOME SCE: W 09.30–04.30, Sun 12.30–03.30. Spanish/Papiamento on 1010kc; Dutch/English on 1500kc; Spanish/Papiamento/Dutch/English on 1385kc: W 11.30–18.30, 22.30–02.30. Sun 14.30–17.30, 22.30–02.30.
ANN: English: "This is station PJC7 R. Hoyer transmitting on..." – **V.** by QSL-card – **FI:** R. Hoyer 1 and 3 by adv. Hoyer 2 on cultural basis.

RADIO CARIBE (Comm.)
ADDR: Nieuwestraat 22B, Willemstad. **Te:** 12801. **Cable:** R. Caribe – **L.P:** Dir. Gen: C. R. Heillegger. Dir. Tec: G. A. T. Heillegger.
STATION: PJL3 1230kc 0.25kW – 1540kc 1kW.
HOME SCE: 10.00(Sun 12.00)–04.00 – **W: Papiamento:** 10.00–17.00, 19.00–22.00, 01.00–04.00. **N:** 16.15–17.00 – **Spanish:** 17.00–19.00, 22.00–01.00. **N:** 17.00, 18.00(VOA), 22.00, 00.15 – **Sun: English:** (rlg. prgr's): 12.00–14.00, 22.00–23.00 – **Papiamento:** 14.00–17.00, 18.30–22.00, 23.00–04.00 – **Spanish:** 17.00–18.30 (Port music with ann. in Sp.) – **N:** 18.15 – **V.** by letter. Recordings accepted.

ARUBA

RADIO KELKBOOM (Comm.)
ADDR: P.O. Box 146, Oranjestad. **Cable:** Kelkboom. **Te:** 1899 – **L.P:** Mgr: C. A. Kelkboom.
STATION (System: Gates): PJA5 1435kc 1kW.
HOME SCE: 11.00 (Sun 14.00)–02.00 – **Papiamento: N:** 11.30 12.30, 14.00, 15.00, 16.15, 16.45, 20.30, 22.00 – **Spanish:** Tues, Sat 00.15–00.45 – **Dutch:** Sun: 14.30–15.00, 16.30–17.00, 20.00–20.30, 23.45–24.00, Tues: 18.30–19.00, Wed: 01.15–01.45 – **ANN:** Dutch: "Hier PJA-5 R. Kelkboom te Oranjestad Aruba". E: "This is PJA-5 R. Kelkboom at Oranjestad Aruba". Papiamento: "Ta transmiti R. Kelkboom PJA-5 na Oranjestad, Aruba" – **V.** by QSL-card. Rp.

RADIO VICTORIA (Owned and sponsored by The Evangelical Alliance Mission – Team.)
ADDR: P.O. Box 410, Aruba. **Te:** 7090. **Cable:** Team – **L.P:** Mgr: Rev. P. J. Pietsch Jr. Chief Eng: R. C. Mitchell.
HOME SCE: PJA6 920kc 326.1m 10kW: W 10.00–02.00, Sun 11.00–01.00.
English: 11.30–12.00, 13.30–15.30, 16.30–19.30, 20.30–21.00, 23.15–01.00. **N:** 11.30, 16.30, 22.30 – **Dutch:** 22.45–23.15, 01.00–02.00. **N:** 22.45 – **Papiamento & Spanish:** 10.00–11.30, 12.00–13.30, 15.30–16.30, 19.30–20.30, 21.00–22.30. **N:** 11.15, 13.15, 16.00, 20.15, 22.00.
ANN: E: "This is R. Victoria, The Cultural Voice of the Caribbean". Dutch: "Dit is R. Victoria, de Culturele Stem van het Caribbish Gebied". Sp: "Transmite R. Victoria, la Voz Cultural del Caribe" – **PUB:** Prgr. sched. free upon request – **V.** by letter. Rp. Recordings accepted – **FI:** By comm & adv. and free will offerings.

RADIO ANTILIANA (Comm.)
ADDR: Bernardstraat 61, St. Nicolaas. **Te:** 5602 – **L.P:** Dir. Gen: E. J. Prins. Gen. Mgr: H. E. A. Booy. Dir. Tec: F. Ramsey.
STATION (System Philips): PJA8 1270kc 1kW.
HOME SCE: in Papiamento, English, Dutch: Sun–Fri 09.30–05.00, Sat 09.30–08.00. **N(W): English:** 10.40, 11.40, 14.40, 16.35, 17.00. **Papiamento:** 11.00, 12.00, 13.30, 16.50, 17.30, 21.30, 23.00 – **ANN:** "This is st. PJA8, R. Antiliana, transmitting on a freq. of 1270kc which equals a wavelength of 236.2m, from studios located in Bernardstraat, San Nicolaas, Aruba, Isle of progress in the NA" – **V.** by letter. Recordings accepted.

VOICE OF ARUBA (Comm.)
ADDR: Van Leeuwenhoekstraat 12, Oranjestad.
L.P: Dir: A. M. Arends Jr. Dir. Tec: D. Odor.
STATION: PJA-10 1325kc 1kW.
HOME SCE. in Dutch, English, Spanish: 10.30(Sun 12.30)–02.30.
ANN: "You are tuned to Station PJA-10 – The Voice of Aruba" – **INT-SIG:** 4 strokes on a 4 metal bar percussion instrument – **V.** by QSL-card or letter.

BONAIRE

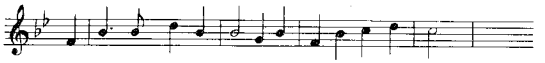
TRANS WORLD RADIO (Cultural, Educational, Religioús)
ADDR: Trans World Radio, Bonaire. **Te:** 8471. **Cable:** Votan.
L.P: Pres: Dr. P. E. Freed. Dir. Gen: R. Freed. St. Mgr: W. P. Mial. Dir. Tec: R. Kennedy, R. E. Schultz.

STATIONS: 800kc 375m 500kW.
Shortwaves: One tr 50kW, one tr. 260kW.

kc	m	kc	m	kc	m	kc	m
5960	50.34	9710	30.90	11855	25.31	15220	19.71
9590	31.28	11815	25.39	15130	19.83	15245	19.68
9605	31.23	11820	25.38				

D.PRGRS: On 800kc: 09.30–12.35 (Sun 15.30), 21.45–23.30, 01.30–05.05. **English:** 11.00–12.35 (Sun 15.30), 02.00–05.05 – **Spanish:** 09.30–11.00, 22.15–23.00, 01.30–02.00 – **French:** 22.00–22.15 – **Dutch:** 21.45–22.00(Sun) – **Portuguese:** 23.00–23.30 – **German:** 23.00–23.15 (Wed, Thurs only). **N: English:** 11.00, 12.30, 03.30, 04.00, 04.30, 05.00 – **Spanish:** 09.30, 22.25.
Short Wave Schedule: Transmitter I (50kW): 09.30–12.35 (Sun 09.30–15.30), 20.00–05.00.

Arabic, Armenian: 04.30–04.45(IV) on 5960kc – **Eastern European:** 04.45–05.00(V) on 5960kc; 20.00–20.15(V) on 15245kc – **English:** 11.05–12.35 (Sun 11.05–15.30) (II) on 11820kc, 21.15–21.30(V) on 15245kc, 02.30–03.55(II) on 11820kc – **French:** 20.15–20.30(V) on 15245kc, 22.00–22.15(V) on 15245kc – **German:** 20.35–21.00(V) on 15245kc – **Portuguese:** 09.30–10.00(I) on 9710kc, 21.45–22.00(V) on 15245kc, 23.00–23.30(I) on 9605kc, 00.30–01.00(I) on 15130kc – **Russian:** 04.00–04.30(V) on 5960kc, 01.00–01.30(I) on 15130kc – **Spanish:** 10.00–11.00(I) on 9710kc, 21.30–21.45(V) on 15245kc, 22.25–23.00(I) on 9605kc, 23.30–00.25(III) on 9605kc, 01.30–02.25(I) on 15130kc.
Transmitter II (260kW): 23.30–01.20 – **English:** 00.30–01.05(II) on 11820kc – **French:** 01.05–01.20(II) on 11820kc – **German:** 23.30–23.55(I) on 15130kc – **Portuguese:** 23.55–00.10(I) on 15130kc – **Spanish:** 00.10–00.25(I) on 15130kc.
NEWS: English: 12.05 (tr I), 00.30 (tr II), 03.30 (tr I). **Spanish:** 00.15 (tr I), 02.15 (tr I).
DX-Special: Sun 03.35, Fri 12.05, 21.00 (incl. features "Mailbag Corner" music "What's New" (new development in science and communications) and other special features of interest to DX-ers).
Relay R. Nederland: 21.30–22.20 & 22.30–23.20 on 15220kc (21.30 English to We. Africa, 22.30 Spanish to So. America); 01.30–02.20, 02.30–03.50 & 04.00–04.50 on 9590kc (01.30 English, 02.30 Dutch to No. America, 04.00 Spanish to Ce. America).
ANN: "This is the international sound of the Carribean, Trans World Radio, Bonaire" – **INT-SIG:** "Stand up, Stand up for Jesus" played on trumpet.



V. by QSL-card. Rp. preferred. IRC's replied by airmail, all other correspondence by surface mail. Re. in E & Sp, no tapes – **PUB:** Prgr. schedule free – **FI:** Voluntary contributions from individuals, organisations, foundations, churches.

THE VOICE OF BONAIRE (Comm).
ADDR. & **L.P:** See Hoyer – **STATION:** PJB2 1385kc 1kW.
HOME SCE: W 11.30–18.30, 22.30–02.30, Sun 14.30–17.30, 22.30–02.30.

ST. MAARTEN

THE VOICE OF SINT MAARTEN (Comm.)
ADDR: P.O. Box 175, St. Maarten. Te: 2373 – **L.P:** Dir: N. C. Wathey. Gen. Mgr: R. A. Mayer. Asst. Mgr: F. W. Vlaun.

Christ to the World in 25 languages

TWR

Trans World Radio

MONTE CARLO
MONACO

BONAIRE
NETH. ANTILLES

Paul E. Freed, Ph. D.
PRESIDENT

STATION: PJD2 1295kc 10kW – **HOME SCE:** 09.00–02.00.
ANN: "This is the Voice of Sint Maarten, R. St. PJD2 transmitting on an assigned freq. of 1295kc, the Gospel Voice of the Eastern Caribbean, proclaiming Jesus Deliverance to you and yours, from the Island of St. Maarten, NA, the beach island of the Caribbean" – **V.** by QSL-card – **F.PL:** 10kW.

NICARAGUA

L.T: GMT – 6 h – **Pr.L:** Spanish.

JEFATURA DEL RADIO NACIONAL, Apt. 209, Managua.
STATIONS: All st's comm. exc. 12 – (Gov), 6) (Cultural), 18) (Rel).

Short Waves: Call: YN—.

	Call	kc	m	kW	Name	h of tr.
1)	RG	5955	50.38	0.5	R. Zelaya, Bluefields	
2)	W	5965	50.29	0.5	R. Mundial[1], Managua:	11.00–05.30
3)	RZ	5975	50.21	1	R. Centenario, Matagalpa	
4)	CA	6120	49.02	1	R. Atlantico, Bluefields	
5)	WW	6140	48.86	0.5	R. Sport, Granada	
6)	JM	6200	48.39	1	R. Norte, Somoto	
7)	TZ	9550	31.41	1	R. Jinotega, Jinotega	

Medium Waves: Call: YN—. °=Short Wave.

	Call	kc	kW		Call	kc	kW		Call	kc	kW
8)	TT	540	0.5	23)	LU	965	5	40)	RA	1300	3
9)	G	555	2	24)	CR	980	0.5	28)	P	°1310	2
10)	RR	570	5	25)	T	1000	10	41)	XZ	1320	0.2
11)	RD	590	10	26)	VOZ	1015	3	42)	DM	1340	0.5
12)	M	620	10	2)	W3	1025	1[1]	43)	RM	1350	2
13)	X	640	1	27)	LL	1050	2[2]	44)	GF	1360	0.25
5)	WW	°650	1[1 2]	28)	TW	1080	0.5	13)	X	1370	1
14)	D	675	15	29)	AE	1090	1	13)	X	1400	1
15)	SC	700	10	30)	Q	1100	3	13)	X	1420	1
16)	S	725	1	28)	P	1115	1	45)	AJ	1430	10
13)	X	750	10	31)	RC	1130	10	46)	MS	1440	0.5
2)	W	°780	1	19)	MV	1140	1	47)	DM	1450	1
17)	O	800	1	32)	BC	1150	0.5	48)	TJ	1460	0.3
18)	OL	825	15	33)	UW	1170	1	49)	AG	1475	2
19)	AV	850	10	34)	C	1200	0.5	50)	PT	1500	1.5
2)	W1	870	1[1]	35)	OP	1220	0.5	51)	CZ	1515	1
20)	OX	885	10	36)	CW	1230	3[2]	52)	PR	1560	0.25
21)	NS	900	5	37)	SV	1240	1	53)	E	1580	2.8
22)	RA	915	1	38)	WX	1270	2.5	54)	AW	1590	1
2)	W	°930	10[1]	39)	RPS	1285	2				

[1] R. Mundial Netw.– [2] R. Sport Netw.

Short Waves:
1) Apt. 72, Bluefields. **L.P:** Dir: R. Austin G.
2) 5a Av N.O. 703, Managua. **Te:** 3851 – **L.P:** Dir. Gen: J. Cesar Sandoval. Dir. Tec: F. Arana V. **D.Prgr: N:** 12.45, 18.00, 19.30. **Ann:** "Cadena Nicaraguense de Radiodifusion desde R. Mundial en Managua". **Int-Sig:** Gong. **V.** by letter. Recordings accepted.
3) Matagalpa. **L.P:** Dir: A. Aldana Z – 4) Bluefields. **L.P:** Dir: S. Sandoval de Mena – 5) Granada. **L.P:** Dir: M. Arana V – 6) Somoto. **L.P:** Dir: J. J. Molina – 7) Jinotega. **L.P:** Dir: T. Morales M.

Medium Waves:
8) **R. Corporación,** Managua – 9) **R. Tic Tac,** Chinandega – 10) **R. Reforma,** Manugua – 11) **R. Quinientosnoventa,** Managua.
12) **R. difusora Nacional,** Edif. Bernard, Managua. **Ann:** "Paz, Libertad, Progreso, transmite R.dif. Nacional de Nicaragua". **V.** by letter.
13) **R. Equis,** Apt. 1505, Managua. **Te:** 5404. **Cable:** Tevenic. **L.P:** Dir. Gen: R. O. Cano. Dir. Tec: J. Maria C. Dir. Prgr's: M. Jiron C. **D.Prgr:** 11.00–06.00. **Ann:** "Mas y mejor musica por la Equis Naturalmente" or "No hay exito sin Equis". **Int-Sig:** Xylophone. **V.** by letter – **Relay st's:** 640kc (Chichigalpa), 810kc (Matagalpa), 1370kc (Esteli), 1400kc (Chontanles)+FM: 96Mc (Managua) & 94Mc (Las Nubes). **F.PL:** 50kW mw-tr to operate in 1967.
14) **Union Radio:** Apt. 1148, Managua. **Ann:** "Union R, La Onda Musical y Deportiva 675kc, Managua de la Cadena Inter-Americana RNYW de New York". **V.** by QSL-card and letter. **Pub: Prgr.** sched. free on request.
15) **R. Centauro,** Managua – 16) **R. Titania,** León – 17) **R. Ivania,** Managua.
18) **R. Ondas de Luz,** Apt. 607, Managua. **L.P:** Dir: F.M. Doña. **D.Prgr:** Sp: 12.00–03.00. E: 03.00–04.00. **N:** 01.00, 04.00, 18.00. **Ann:** Sp: "En sintonia con R. Ondas de Luz", única emisora en el pais sin anuncios comerciales con su lema "Orientando su camino con la luz de la Verdad". E: "You are in tune with the radio voice of YNOL "Waves of Lights" from Managua, the beautiful land of lakes and volcanos". **V.** by QSL-card or letter.
19) **R. Continental,** Av. Este 1200, Managua – 20) **R. Libertad,** Managua – 21) **R. Alma Nica,** Managua – 22) **R. Americana,** Granada – 23) **R. Managua,** Managua – 24) **R. Mongalo,** Rivas.

25) **R. Mil**, Managua – 26) **R. Reloj**, Managua – 27) **R. Masaya**, Masaya – 28) **R. Circuito**, Leon – 29) **R. Musun**, Matagalpa – 30) **La Voz de la Victoria**, Managua.
31) **R. Catolica de Nicaragua**, Apt. 1130, Managua. **V.** by letter.
32) **R. Ondas Segovia**, Esteli – 33) **R. Dario**, Leon – 34) **R. Capital**, Managua – 35) **R. Cultural** Carazo, Jinotepe – 36) **R. Occidental**, Chinandega – 37) **R. El Mundo**, Managua.
38) **R. Atenas**, Leon – 39) **R. Granada**, Granada.
40) **La Voz de Chinandega**, Chinandega – 41) **R. Cocibolca**, Granada – 42) **Ondas Sonores**, Managua – 43) **R. Alma Latina**, Esteli – 44) **Ondas del Sur**, Jinotepe.
45) **R. Voz de América**, Managua – 46) **Ondas Populares**, Leon – 47) **R. City**, Managua – 48) **R. Ecos de las Brumas**, Jinotega – 49) **R. Cosiguina**, Chinandega.
50) **R. Tierra Pinolera**, Managua – 51) **R. Progreso**, Leon – 52) **R. Centroamerica**, Managua – 53) **R. Femenina**, Managua – 54) **R. Colinas**, Jinotega.

PANAMA

L.T: GMT – 5 h – **Pr.L:** Spanish.

GOVT. DEPT. JURISDICTION

ADDR: Dirección Técnica de Radiocommunicaciones, Ministerio de Gobierno y Justica, Apt. 3422, Panamá. **Cable:** Dirgentel Radio – **L.P:** Dir. Tec: Eng. F. A. Lamparero.

ASOCIACION PANAMEÑA DE RADIODIFUSIÓN

ADDR: Apt. 7387, Panama.
STATIONS: C=Circuito. *=currently inactive.
All st's comm. exc. 10) (Rlg), 19) (Cultural & Rlg), 20) (Mil).
Short Waves:

	Call	kc	m	kW	Name and h. of tr.
1)	HOM50	5995	50.04	1	C.R.P.C., Panama: 11.55–05.00
2)	HP5B	*6030	49.75	0.25	R. Cadena Miramar, Panama
3)	HOU31	6045	49.63	1	La Voz del Baru, David: 11.00–04.00
4)	HOLA	*9505	31.56	0.25	R. Atlántico, Colon
5)	HP6J	*9607	31.23	0.5	La Voz de Panamá
1)	HOF31	9685	30.98	1	Onda Popular, Panamá: 12.00–05.00

Medium Waves: Call: HO—. °=Short Waves.

Call	kc	kW	Call	kc	kW
6) U23	540	0.25	25) D21	1070	0.25
7) N31	550	1	15) G2	1090	0.25
1) H2	560	0.25	26) R58	1100	0.25
1) H3	590	1	1) F47	1120	1
1) HM	610	10	27) J	1130	1
8) K	640	0.25	28) B49	1140	1
9) S22	°645	1	29) S25	1150	0.25
1) H4	660	1	17) NZ	1170	0.25
10) LY	670	1	30) OC	1180	1
11) F32	680	0.5	31) E91	1210	4
12) A	700	1	12) W	1230	0.25
2) HP5C	°730	1	32) M56	1240	1
13) XO	760	5	33) Q	1250	0.25
14) ACA20	790	5	34) J22	1270	0.5
1) F33	810	1	35) JU	1280	0.25
15) G	830	0.25	11) S23	1295	1
7) N32	840	10	4) K3	1310	0.25
16) HO	870	1	36) L55	1315	1
17) R34	890	1	28) M92	1330	0.25
18) HA	900	0.5	5) HP6J	°1380	0.25
9) S56	920	1	4) L	°1390	0.25
19) X	940	0.5	37) HS	1400	1
20) B33	950	1	38) RS	1410	0.5
1) F	°965	3	14) ACB20	1420	1
21) R59	990	1	8) C	1440	0.25
22) U44	1015	1	39) D42	1460	0.25
1) F2	1020	0.25	40) OH	1470	1
3) U	°1025	1	42) R43	1490	0.25
23) S21	1035	1	41) N	1500	1
24) J2	1045	1	43) A95	1505	1
5) HPM21	1060	1			

Short Waves:
1) Apt. 1795, Panama. **Te:** 5-0160. **Cable:** Erepece. **C.R.P.C:** HOH2 Colon, HOH3 Chitre, HOHM Panama, HOH4 David. **Onda Popular:** HOF33 Bocas del Toro. HOS47 Darien, HOF Panama, HOF2 Colon. **Ann:** "Onda Popular". **V.** by QSL-card. Re. in Sp. or E.
2) Apt. 1214, Panama. **Te:** 30239. **V.** by QSL-card.
3) Apt. 160, David.
4) Apt. 44, Colon. HOK3: **La Onda de la Alegria. V.** by QSL-card.
5) HP5J/HP6J: Apt. 867, Panama. HPM21: **La Voz de Ancon**, Av. Central 169, Panama. **L.P:** Pres: M. Diaz Doce. Gen. Mgr: J. G. Diaz J. **Ann:** "Desde Panama Puente del Mundo Corazon del Universo Transmite La Voz de Panama decana de las Emisoras Nacionales Compruebe su tiempo". **V.** by letter.

Medium Waves:
6) **R. Zarati**, Apt. 5661, Penonome – 7) **R. Aeropuerto**, Apt. 4824, Panama – 8) **Cadena Panameña de Radiodif**, Apt. 33, Colon – 9) **R. Mia**, Apt. 5117, Panama. **L.P:** Pres: R. Pereira P. **D.Prgr:** 10.00–04.30.
10) **R. Hogar**, Apt. 1979, Panama. **Te:** 3-5425. **Ann:** "R. Hogar, una emisora al servicio de la paz y la verdad". **V.** by letter. Re. in Sp. E
11) **R. Centenario**, Apt. 3, Puerto Armuelles – 12) **La Voz de Panama**, Apt. 1121, Panama.
13) **La Voz del Istmo**, Apt. 3269, Panama. **L.P:** Dir. Gen: R. Lay. Dir. Tec: C. Perez. **D.Prgr:** 10.45–04.15. **English:** 11.15–13.30, 01.15–03.00, Other times in Spanish. **N: E** 12.00, Sp. 11.00, 13.30, 17.00, 23.00, 04.00. **Ann:** E: "This is HOXO, the Voice of the Isthmus, 760kc in Panama". Sp: "Esta es La Voz del Istmo, 760kc en Panama, HOXO". **V.** by QSL-card.
14) **Southern Command Network (AFRTS)**, Ft. Clayton, Canal Zone.
15) **Estacion de la Communidad**, Apt. 1121, Panama – 16) **R. Musical**, Apt. 355, Panama – 17) **Ondas Istmenas**, Apt. 3237, Panama – 18) **La Voz del Pueblo**, Apt. 1045, Panama – 19) Panama.
20) **R. Cultura**, Apt. 249, Concepcion – 21) **R. Leblanc**, Panama – 22) **R. Reloj**, Apt. 5124, Panama – 23) **Victor Miranda**, Panama – 24) **Ondas del Canajagua**, Apt. 10, Las Tablas. **D.Prgr:** 24 h. **V.** by letter.
25) **Ondas del Caribe**, Av. Melendez y Roosevelt, 8044, Colon – 26) **R. Mil Cien**, Apt. 1100, Panama – 27) **R. Provincias**, Apt. 1174, Chitré – 28) **Cadena Universal**, Panama – 29) **R. Mia de Colon** – 30) **C. de Ondas Chiricanas**, Apt. 172, Panama – 31) **R. El Mundo**, Apt. 1566, Panama – 32) **R. David**, Apt. 328, David – 33) **R. Nacional**, Apt. 552, Panama.
34) **Radio la Tribuna** – 35) **La Voz del Vigia**, Aguadulce — 36) **R. Reforma**, Apt. 1201, Chitre. **V.** by QSL-card and letter.
37) **Ondas Centrales**, Santiago – 38) **R. Selecta**, Apt. 4369, Panama – 39) **La Voz de Almirante**, Ca. 6a y Av. N, Almirante – 40) **R. Independiente**, Apt. 4545, Panama – 41) **La Voz de la Victor**, Apt. 33, Colon – 42) **R. Exito**, Chorrera – 43) **R. Variedades**, Panama.

PUERTO RICO (U.S. Territory)

L.T: GMT–4 h **Pr.L:** Spanish, English.

BROADCASTERS ASSOCIATION OF PUERTO RICO

ADDR: P.O. Box 10144, Santurce.
STATIONS: All st's comm. exc. 13) – [1]=also FM.

	Call	kc	kW	Call	kc	kW	Call	kc	kW
1)	WPAB	550[1]5/1		15) WMIA	1070	0.5	29) WVOZ	1400	0.25
2)	WKAQ	580[1]5		16) WLEO	1080	0.25	30) WEUC	1420	1
3)	WAEL	600	1	17) WRIS	1090	0.25	31) WNEL	1430	5/
4)	WKYN	630	1	18) WVJP	1110	0.25			0.5
5)	WAPA	680	10	19) WITA	1140[1]0	.5	32) WFBA	1460	0.5
6)	WKJB	710	1	16) WLEO	1170	0.25	33) WMDD	1480	5
7)	WIAC	740	10	20) WNIK	1230	1	34) WMNT	1500	1/
8)	WORA	760	5	21) WALO	1240	1			0.25
9)	WKVM	810	25	22) WISO	1260	1	35) WRAI	1520	0.25
10)	WABA	850	0.5	23) WCMN	1280	5/1	36) WUPR	1530	1
11)	WHOA	870	5	24) WTIL	1300	1	16) WKFE	1550	0.25
12)	WPRP	9105/0.5		25) WUNO	1320	5/1	37) WRSJ	15605/	
13)	WIPR	940[1]10		26) WGRF	1340	0.25			0.25
14)	WPRA	990	1	27) WIVV	1370	1	38) WXRF	1590	1

D.PRGR: 10.00 to approx. 04.00 exc. where indicated.
1) **Portorican American Broadc. Co**, P.O. Box 786, Ponce. **L.P:** Pres. & Gen. Mgr: A. Gimenez-Aguayo Comm Mgr: L W Morales **D.Prgr:** 10 00–03 00 in Spanish **N. in English:** 10 30, 22.30.
2) **El Mundo Broadc. Corp**, Box 9007, Santurce. **L.P:** Gen. Mgr: V. Lamas, Jr. Comm. Mgr: G. Felix. **D.Prgr:** 10.00–03.15 in Spanish.
3) **WAEL, Inc.**, Box 297, Mayaguez. **L.P:** Pres. & Gen. Mgr: M. Pirallo. Comm. Mgr: F. Marcias – 4) **Quality Broadc. Corp**, Box 9986, Santurce. **L.P:** Gen. Mgr: R. Bennett. Comm. Mgr: T.W. Fields – 5) **Hearst Radio, Inc**, Box 4563, San Juan. **L.P:** Vice Pres. & Gen. Mgr: C. Franco. **D.Prgr:** 09.09–04.00 in Spanish.
6) **Jose A. Bechara, Jr.** Box 1293, Mayaguez. **L.P:** Gen. Mgr: I. Mendez. Comm. Mgr: E. E. Gemma – 7) **Bestov Broadc. Inc.** Box 4504, San Juan. **L.P:** Gen. Mgr: L.A. Mejia – 8) **R. Americas Corp**, Box 43, Mayaguez. **L.P:** Pres: A.R. de Arellano, Jr. **D.Prgr:** 10.00–02.00.
9) **American Colonial Broadc. Corp**, Box 4189, San Juan. **L.P:** Pres. & Gen. Mgr: R. P. Perry – 10) **R. WABA**, Box 188, Aguadilla. **L.P:** Gen. Mgr: F. Bonnet.
11) **Continental Broadc. Corp**, Box V, Hato Rey. **L.P:** Pres. & Gen. Mgr: C. Mendez. **D.Prgr:** 10.00–04.55 (Sat 05.55), Sun 11.30–04.58.
12) **Voice of Puerto Rico**, Box 430, Ponce. **L.P:** Pres. & Gen. Mgr: A. R. de Arellano.
13) **Dept. of Education of P.R.**, P.O. Box 909, San Juan. **D.Prgr:** 11.00 (Sun 12.00) – 02.15. **N:** 14.00, 16.00, 19.00, 22.00. **Ann:** "These are r.st's WIPR and WIPR-FM in San Juan, Puerto Rico". **V.** by QSL-card.

14) **WPRA, Inc.** Box 869, Mayaguez. **L.P:** Pres. & Gen. Mgr: A. Camara. Comm. & St. Mgr: P. Ojeda. 24 h.
15) **Abacoa R. Corp,** Box 1015, Arecibo. **L.P:** Gen. & Comm. Mgr: E. Rodriguez-Velez. **D,Prgr:** 09.30–04.00.
16) **Ponce Broadc. Corp.** Box 1186, Cayey. **L.P:** Gen. Mgr. Ch. Cordero – (WLEY on 1080 kc.)
Ponce Broadc. Corp. Box 38, Playa Ponce, L.P: Gen. Mgr: Ch. Cordero – (WLEO on 1070 kc).
17) **R. Station WRSJ,** San German – 18) **Borinquen Broadc. Co,** Box 207, Caguas **L.P:** Gen. Mgr: H. Pereira. **D. Prgr:** 12.00–03.00.
19) **Electronic Enterprises Inc,** Box 2792, San Juan. **L.P:** Pres. & Gen. Mgr: A.A. Valdivieso. **D. Prgr:** 04.00–16.00.
20) **Arecibo R. Corp,** Box 908, Arecibo. **L.P:** Gen. Mgr: D. Ortiz. **D.Prgr:** 10.00–03.00. **V.** by letter. **Rp** – 21) **R. WALO,** Box 1055, Humaco.
22) **South Puerto Rico Broadc. Corp,** Box 2023, Ponce. **L.P:** Gen. & Comm. Mgr: L.E. Freyre. **V.** by letter – 23) **Caribbean Broadc. Corp,** Box 436, Arecibo. **L.P:** Gen. & Comm. Mgr: N. Barreto – 24) **Mayaguez R. Corp,** Box 1360, Mayaguez. **L.P:** Pres. & Gen. Mgr: G. Mamary. Comm. Mgr: W. Mamary. **D.Prgr:** 24h.
25) **San Juan Broadc. Corp,** Box Q, Hato Rey. **L.P:** Gen. Mgr: M. A. Escudero.
26) **Jaicoa Broadc. Corp,** Box 766, Aguadilla. **L.P:** Gen. Mgr: M. A. del Valle. **D.Prgr:** 10.00–03.00.
27) **Calvary Baptist Mission of P.R.** Box 67, Rio Piedras. **L.P:** Dir. Gen: D. Luttrell. Dir. Tec: W.T. Forrester. Dir. Prgr: Ruth Luttrell. **D.Prgr:** 09.25–01.40. **N. in English:** 11.45, 17.00, 23.00. **Mbg:** 19.00–21.00. **V.** by letter. **Re** to Viques Island, P.R. **Pub:** WIVVR. News.
29) **Radio Voz,** Box V, University Station, San Juan. **L.P:** Gen. Mgr: P. Roman-Collazo. Comm. Mgr: Pedro Roman – Collazo.
30) **Catholic University of Puerto Rico,** Service Assn. Campus, Ponce.
31) **Quilanz,** Box 5369, San Jose. **L.P:** Pres. & Gen. Mgr: S. Quinones, Jr. **D.Prgr:** 24 h. **N:** Every h on the h – 32) **Petmo Broadcasters,** Box 127, San Sebastian – 33) **Pan Caribbean Broadc. Corp.** Box 387, Fajardo. **L.P:** Gen. Mgr: J. L. Torregrosa. Comm. Mgr: L. Jimenez. **D. Prgr:** 11.00–03.00. **V.** by QSL-card. – 34) **Arecibo Broadc. Corp,** Manati. 35) **Abacoa Radio Corp,** Box 1252, Hato Rey. **L.P:** Pres. & Gen. Mgr: C. Pirallo. Lopez. – 36) **Central Broadc. Corp,** Box 687, Utado. 37) **R. San Juan,** P.O. Box 5627, San Juan. **L.P:** Gen. Mgr: M.S. Martinez. **D. Prgr:** 09.30–05.00 – 38) **Guayama Broadc. Co,** Box 615, Guayama. **L.P:** Gen. Mgr: G. Cordero. **D. Prgr:** 10.30–03.00. **V.** by QSL-card.

ARMED FORCES RADIO & TV SCE: see USA.

SWAN ISLAND

L.T: GMT–6 h – **Pr.L:** Spanish.
RADIO AMERICAS (Comm.)
ADDR: P.O. Box 352, Miami 1, Fla, USA. **Te:** 444–8287 – **L.P:** Pres: H. Roosevelt. St. Mgr. & Dir. Tec: S. Clark.
STATIONS (G.C: 83.56W/17.24N): 1160kc 257.5m 50kW – 6000kc 50.00m 7.5kW.
D.PRGR'S in Spanish: 10.00–13.30, 22.00–07.00 – **N:** 10.55, 11.55, 12.45, 22.55, 23.55, 00.55, 01.55, 03.55, 04.45, 05.25, 05.55, 06.25, 06.45 – **ANN:** Sp: "Esta es R. Americas, La Voz de la Verdad para todo el Continente" – **INT-SIG:** First six notes of "Americas Immortal lyre" – **V.** by QSL-card. Rp. appreciated. Ribbons to those reporting the musical prgr's and voting for numbers for Hit Parade prgr's.

TRINIDAD & TOBAGO

L.T: GMT – 4 h – **Pr.L:** English.
TRINIDAD BROADCASTING CO. (Comm.)
ADDR: Broadc. House, 11B, Maraval Rd, Port-of-Spain. **Cable:** Broadcast. **Te:** 21151 – **L.P:** St. Mgr: P. E. M. Hesketh. Dir. Tec: E. R. McDowell. Dir. Prgr: Mrs. J. Gonsalves.
STATIONS (System: Redifon 2+10kW tr's):
730kc 410m 20kW – FM: 95.1Mc 1kW.
HOME SCE: in English: D 10.00–03.15 * incl. Wrp. **N:** 10.00, 10.45, 11.00*, 12.00, 13.00*, 14.00, 15.00, 16.00*, 16.30, 17.00, 18.00*, 19.00, 20.00*, 21.00, 22.00, 23.00, 23.45, 01.45, 02.00*, 02.15, 03.00* – **ANN:** "This is R. Trinidad, first with the news" – **V.** by letter. Recordings accepted. **AD:** 10 min's per h.
All R. Trinidad prgr's are also relayed to Rediffusion subscribers.

RADIO GUARDIAN (Comm.)
ADDR: 17 Abercromby Str, Port of Spain. **Te:** 32618. **Cable:** Voice. **L.P:** Gen. Mgr: P. A. Pitts. Dir. Tec: F. Thompson. Dir. Prgr: L. de Leon.
STATIONS: VPL6 610kc 10kW – **FM:** 98.9Mc 0.25kW.
HOME SCE. in English: 09.56–03.07. **N:** on the h (BBC/WS 12.00, 18.00) – **Gov. Prgr:** 00.00 – **Wrp:** On the ½ h.
ANN: "This is R. Guardian, The Voice of Trinidad & Tobago – **INT-SIG:** At sign on: The tune "Yellow Bird, Choucoun Destiny" played on Guitar & Xylophone – **V.** by letter. Rp. Recordings accepted.

TURK & CAICOS ISLANDS (British)

L.T: GMT –5 h – **Pr.L:** English.
RADIO STATION VSI35
ADDR: Cable and Wireless (West Indies) Ltd, Mercury House, Grand Turk. **Te:** 2. **Cable:** Cablewire – **L.P:** St. Mgr: P. H. Straw.
STATION (System: Marconi): VSI35 8000kc 37.5m 0.2kW.
D. PRGR'S: N. in English: 18.30 (10 to 20 min's). Local **N:** issued by the Gov – **ANN:** "R. St. VSI35 owned and operated by Cable and Wireless (W.I.) Limited" – **V.** by letter. Rp.

VIRGIN ISLANDS (American)

L.T: GMT –4 h – **Pr.L:** English.
RADIO AMERICAN WEST INDIES, INC. (Comm.)
ADDR: P.O. Box 931, Christiansted, St. Croix. **Te:** 733-0390 – **L.P:** Dir. Gen: Mrs. H. M. Higdon. St. Mgr: Mrs. M. P. Lang. Dir. Tec: R. E. Higdon – **STATION:** WIVI 970kc 5kW – **FM:** 99.5Mc 4.9W.
D.PRGR: 24 h – **N: English:** On the h (Headlines on the half h) – **Wrp:** 17.15 – **Spanish:** 18.00–20.00 – **ANN:** "This is WIVI, 970 on your dial, located at Fort Louise Augusta, Christiansted, St. Croix, US Virgin Islands".

RADIO STATION WSTA (Comm.)
ADDR: P.O. Box 538, St. Thomas, US Virgin Islands 00802. **Te:** 774–1340. **Cable:** WSTA. **L.P:** Pres: W. M. O'Neil. Exec. Vice Pres. & Gen. Mgr: L. Stein. Asst. Mgr: A. Ottley. Chief Eng: G. Neathery.
STATION: 1340kc 0.25kW – **HOME SCE:** 10.00–04.00. **N:** Every h on the h at 11.00–03.00; also at 21.45, 03.55 – **ANN:** "This is WSTA – 1340 on your dial in St. Thomas, Virgin Islands" – **V.** by letter. Recordings accepted – **F.Pl:** 1kW.

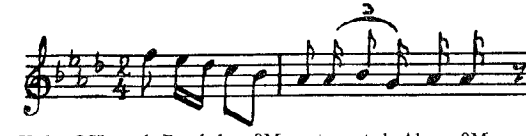
ISLAND TELERADIO SERVICE, INC (Comm.)
ADDR: P.O. Box 1947, St. Thomas, US Virgin Island 00802. **Te:** 774–00300. **Cable:** WBNB – **L.P:** Pres: R. Moss. Secr. Treasurer: R. E. Noble.
STATION (System: Collins): WBNB 1000kc 1kW.
HOME SCE. in English: W 10.00–04.00. Sun 12.00–03.00. **N:** on the h – **ANN:** "WBNB, Radio Ten, St. Thomas" – **V.** by letter. Rp.
FI: By adv. revenues – **AD:** 15.30 or 60 seconds.

WINDWARD ISLANDS

L.T: GMT–4 h – **Pr.L:** English.
WINWARD ISLANDS BROADCASTING SERVICE (Gov.)
ADDR: St. George's, Grenada, W.I. **Te:** 4251. **Cable:** Broadcasts – **L.P:** Man. Dir: A. C. G. Palmer, M. B. E. Dir. Tec: R. A. Smith, Memb, I.E.E.E.
HOME SCE: a) Grenada, b) Dominica, c) St. Vincent, d) St. Lucia, e) Carriacou.

St. George's	a)	535kc 0.5kW	Chateaubelair	c)	1535kc 0.1kW
Castries	d)	1565kc 0.25kW	Kingstown	c)	705kc 0.5kW
Roseau	b)	695kc 0.5kW	Carriacou	e)	1045kc 0.1kW

All mw's: 15.45–02.15.
Short Waves (G.C: 61.46W/12.01N):
3280kc 91.40m 5kW: 21.55–02.15.
5015kc 59.82m 5kW: 15.45–17.45, 19.59–22.45.
9550kc 31.41m 5kW: 15.45–18.00.
N. in English: 16.00*, 16.40(W), 17.15(W), 20.00*, 20.30(W), 22.15(W), 23.00*, 23.45(W), 02.00 – * BBC.
OVERSEAS SCE: I=Jamaica, II=Ascencion Isl, III=British Isles, A=Nov–Feb, B=March–Oct.
11895kc 25.22m 5kW – 11970kc 25.06m 5kW – 15105kc 19.86m 5kW
On 15105kc A: 15.45–18.00, 19.45–20.15, 21.30–22.45(I)
B: 15.45–18.00, 19.45–20.15, 21.30–02.15(I)
A+B: 19.45–20.15(II); B 20.16–21.30(III)
On 11970kc A: 22.45–02.15(I); B 00.00–02.15(I)
On 11895kc A: 20.20–21.30(III)
ANN: "This is the Windward Islands Broadc. Sce."
INT-SIG: A typical calypso phrase played on the "ping-pong", an indigenous instrument made from the top of a steel drum.



V. by QSL-card. **Re:** below 9Mc not wanted. Above 9Mc wanted. Answered to best of ability due very limited staff – **PUB:** Prgr.-sched. (weekly).

RADIO CARIBBEAN (Comm.)
ADDR: P.O. Box 121, Castries, St. Lucia W.I. **Te:** 154 R. 2. **Cable:** Caradio – **L.P:** Mgr: T. K. Archer M.C.I.M. Dir. Prgr's: F. L. J. Luizet.

STATION (System: Collins): 840kc 10kW.
HOME SCE. in English: 10.00(Sun 10.45)–03.00(Sun 02.30).
English: 12.30–13.30(W), 20.00–22.00(D). **N:** 13.00, 20.00 – **French:** W 10.00–12.30, 13.30–18.30(Sat 20.00), 22.00–03.00. Sun 10.45–20.00, 22.00–02.30. **N:** W 10.30, 11.00, 11.45, 12.15, 17.00, 23.00, 01.00. Sun 11.30, 17.00, 23.00, 01.00 – **L.L:** "Keep up your English": Tues, Thurs, Sat 22.00 – **Request Prgr:** French: 23.30, English: 20.45 – **ANN:** E: "This is R. Caribbean International St. Lucia broadc. on a freq. of 840kc in the mw band". F: "Ici R. Caraibes International, Ste. Lucie, emettant sur 840kc" – **V.** by letter. **Rp.** Recordings accepted – **F.PL:** A 10kW tr. to broadc. in English all day in addition to French.

SOUTH AMERICA

ARGENTINA

L.T: March–Oct: GMT – 4 h; Oct–Feb: GMT – 3 h – **Pr.L:** Spanish.

SECRETARIA COMUNICACIONES

ADDR: Sarmiento 151, Buenos Aires. **Te:** 31–5031. **Cable:** Gentel Baires. **L.P:** Secr: J. A. Teglia. Vice Secr: O. R. J. Dietrich.

CONSEJO NACIONAL DE RADIODIFUSION Y TELEVISION (CONART)

ADDR: Ayacucho 1556, Buenos Aires. **L.P:** Pres: C. A. Ibarra.

R. NACIONAL (Servicio Oficial de Radiodifusion – Gov.)

ADDR: Ayacucho 1556, Buenos Aires. **Te:** 84-2021 – **L.P:** Dir. Gen: Dr. T. E. Flores. Vice Dir. Gen: L. A. Quesada. Dir. Tec: J. M. Serrano.

HOME SERVICE: Short Waves: *=Sat/Sun only.

Call	kc	m	kW	Name and h of tr.
LRA31	6060	49.50	50	Buenos Aires: 12.00–15.00
LRA34	6180	48.54	10	Mendoza: 14.00–04.00
LRA33	15345	19.55	50	Buenos Aires: 12.00–18.30

(reported irr. to 22.00)

Medium Waves: °=Short Wave.

Call	kc	kW	Name	h of tr.
LRA13	560	10/3	Bahia Blanca	13.00–19.00, 22.00–04.00
LRA12	620	5	Santo Tome	12.00–17.00, 20.00–04.00
LRA10	620	5	Ushuaia	15.00–03.00
LRA9	690	5	Esquel	15.00–04.00
LRA4	690	10/5	Salta	14.00–04.00
LRA3	730	20/5	Santa Rosa	14.00–04.00
LRA7	750	50	Córdoba	12.00–04.00
LRA8	780	5	Formosa	13.00–04.00
LRA	°870	100	Buenos Aires	12.00–04.00
LRA11	900	5	Comodoro Rivadavia	23.00–04.00
LRA6	°960	20/5	Mendoza	13.00–04.00
LRA15	1030	25/5	Tucumán	22.00–04.00
LRA5	1310	5	Rosario	12.00–04.00

D.PRGR: N: 12.00, 16.00, 24.00 – **V.** by QSL-card.

INTERNATIONAL SERVICE
ADDR: Radiodif. Argentina al Exterior (RAE), Sarmiento 151, Buenos Aires – **L.P:** A. H. Cristiani. Dir. of Prgr's: J. V, D'Angelo. Dir. of Public Relations J. J. Santos.
STATIONS: *=R. Belgrano.

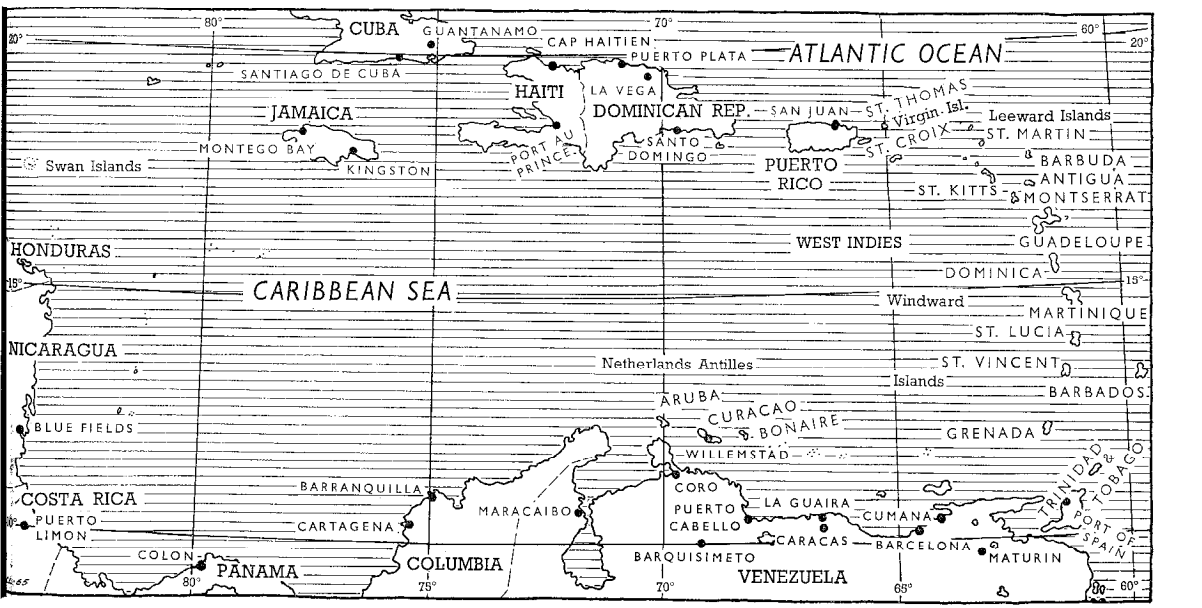
Call	kc	m	kW	Call	kc	m	kW
LRY1	*6090	49.26	40	LRA35	11710	25.62	100
LRA32	9690	30.90	100	LRY2	*11780	25.47	7

TO EUROPE/NO. AFRICA/NEAR EAST: 19.00–22.00 & 22.10–23.00 on 6090/11710/11780kc (19.00 Spanish, 20.00 German, 21.00 Italian, 22.10 French); 23.00–24.00 on 11710kc (English) – **N:** Spanish 19.02, German 20.02, Italian 21.02, French 22.12, English 23.02.
TO NO. AMERICA (East): 00.10–02.00 on 9690kc, 02.00–03.00 on 9690/11780kc, 03.00–04.00 on 6090/9690/11780kc (00.10 Portuguese, 01.00 Spanish, 03.00 English) – **N:** Portuguese 00.12, Spanish 01.02, English 03.02.
TO NO. AMERICA (West): 04.00–07.00 on 6090/9690/11780kc (04.00 Spanish, 06.00 English). **N:** Spanish 04.02, English 06.02.
TO ASIA: Japanese 09.00–10.00 on 9690kc, 10.15–11.15 terts on 9690kc. **N.** 09.02.
NAT. NEWS: To Europe: 22.00–22.10 (Spanish) on 6090/11710/11780kc; **To USA:** 00.00–00.10 (English) on 9690kc, 11.15–11.25 (Spanish) on 9690kc,
ANN: Sp: "Aqui Argentina". G: "Hier spricht Argentinien". I: "Qui Argentina". F: "Ici l'Argentine". E: "This is Argentina Calling". P: "Aqui Argentina". – **V.** by QSL-card.

OFFICIAL STATIONS (Gov.)

Call	kc	kW	Call	kc	kW	Call	kc	kW
1) LS1	710	50	5) LS11	1270	30/5	9) LT21	1520	0.1
2) LU14	730	5	6) LV17	1360	0.25	10) LT19	1550	0.25
3) LT10	1020	10/5	7) LV18	1370	0.25	11) LT24	1550	0.1
4) LT17	1250	5/2	8) LR11	1390	6	12) LR7	1570	0.1

1) **R. Municipal,** Arturo Toscanini 1168, Buenos Aires – **D.Prgr:** 10.00–06.00 – **L.P:** V. Tedin – 2) **R. Provincia de Santa Cruz,** Roca 825, Río Gallegos – **D.Prgr:** 12.00–06.00 – **L.P:** J. Grumblat – 3) **R. Universal del Litoral,** 9 de Julio 3550, Santa Fé – **L.P:** Dir: L. Bonaparte – **D.Prgr:** 16.00–05.00 – 4) **R. Provincia de Misiones,** Casa de Gobierno. Posadas – **D.Prgr:** 14.00–02.00 – **L.P:** Dir: F. Damus. 5) **R. Provincia de Buenos Aires,** Ca. 10 y Av. 53, La Plata. **Te:** 3-9158 – **L.P:** Dir: M. Eloy del Rio. Dir. Tec: M. Angel Cadut – **D.Prgr:** 11.00–04.00 – **V.** by QSL-card or letter – 6) **R. Municipal de Cordoba,** Marcelo T. de Alvear y 27 de Abril, Córdoba – **L.P:** Dir. Gen: E. Adalberto Y – **D.Prgr:** 11.30–00.30 – 7) **R. Municipal de San Rafael,** San Rafael, Mendoza. **L.P:** Dir: A. Maslup. **D.Prgr:** 14.00–18.00 – 8) **R. Universidad Nacional de la Plata,** Plaza Rocha 133, La Plata. **L.P:** Dir. Gen: A. Nunez. **D.Prgr:** 22.00–05.00 – 9) **R. Municipal de Alvear,** Alvear. Corrientes – 10) **R. Municipal de Santo Tomé,** Santo Tomé, Corrientes – 11) **R. Municipal de Rafaela** Rafaela, Santa Fe – 12) **R. Municipal de Avellaneda,** Buenos Aires.



PRIVATELY OWNED COMMERCIAL STATIONS
ACOCIACION RADIODIFUSORAS PRIVADAS ARGENTINAS (A.R.P.A.)
ADDR: Cangallo 1561, Buenos Aires. **Te:** 354412. **L.P:** Dir: F. P. Cachau,
ADMINISTRACIÓN GENERAL DE EMISORAS COMERCIALES DE RADIO TELEVISIÓN – ADDR: Cerrito 941, Buenos Aires. **Te:** 42-0411.
Short Waves: Location: Buenos Aires (all Gov. operated).

Call	kc	m	kW	Name	h of tr.
1) LRS2	5985	50.13	1	R. Splendid	10.00–05.00
2) LRY1	6090	49.26	100	R. Belgrano	15.30–07.00
3) LRX1	6120	49.02	10	R. El Mundo	16.00–02.30
3) LRX	9660	31.06	7	R. El Mundo	10.00–13.45
3) LRX2	9710	30.90	6	R. El Mundo	16.00–02.30
1) LRS1	9740	30.79	10	R. Splendid	10.00–05.00
2) LRY2	11780	25.47	8	R. Belgrano	15.30–07.00
1) LRS	11880	25.25	20	R. Splendid	10.00–05.00
3) LRU	15290	19.62	10	R. El Mundo	14.00–15.45

Medium Waves: °)=Short Wave.

Call	kc	kW	Call	kc	kW	Call	kc	kW
4) LV1	560	10/3	27) LT12	840	10/5	46) LT6	1200	5/3
5) LT15	560	5/3	28) LV7	900	10/5	47) LV3	1210	25/5
6) LW1	580	10/5	1) LR4	°910	50	48) LT2	1230	15/5
7) LV12	590	10/5	2) LR3	°950	100	49) LU10	1240	10/5
8) LS4	590	10/5	29) LW8	960	20/5	50) LV13	1250	5
9) LU8	590	5/1	30) LV2	970	15/5	51) LU17	1260	3.5
10) LS5	630	25	31) LR5	990	50	52) LT9	1260	5/2.5
11) LV14	630	5/1.5	32) LT4	1010	25/3	53) LT11	1300	3/1.5
12) LU4	640	5	33) LV16	1010	10/3	54) LU13	1300	10
13) LV15	640	1	34) LS10	1030	25/5	55) LT14	1330	10/2.5
14) LU9	670	25/5	3) LR1	°1070	100	56) LU11	1340	0.25
15) LT7	670	5	35) LT5	1080	10/5	57) LS6	1350	20/5
16) LU12	680	25/5	36) LV5	1090	15/5	58) LU15	1440	0.25
17) LV6	680	25	37) LR2	1110	20/5	59) LW2	1460	0.25
18) LV10	720	20/5	38) LU7	1120	10/5	60) LU16	1460	0.25
19) LW7	730	5/1	39) LU5	1130	20/5	61) LT13	1470	0.25
20) LV8	780	10	40) LV11	1130	25/5	62) LU19	1470	0.25
21) LR6	790	50	41) LU6	1150	25/5	63) LU21	1510	0.25
22) LU2	820	10/5	42) LT3	1160	10/5	64) LW4	1510	0.25
23) LT16	820	20/3	43) LR9	1190	5	65) LU18	1510	0.25
24) LT8	830	10/5	44) LW3	1190	10/5	66) LU20	1010	0.25
25) LV9	830	10/5	45) LU3	1200	25/5	67) LT18	1550	0.25
26) LV4	840	5						

Priv. st's: 4), 5), 8), 10), 14), 15), 16), 17), 18), 23), 25), 31), 32), 33), 34), 45), 48), 50), 51), 53), 56), and 60) 67).;

Short Waves:
1) Uruguay 1237, Buenos Aires. **Te:** 42-9602. **L.P:** Dir: M. T. Fernandez. Dir. Tec: E. Grazziani. **D.Prgr:** 10.00–05.00. **N:** 10.00, and every h on the h from 11.00. **ANN:** "LR4, R. Splendid de Buenos Aires, con sus ondas cortas, LRS, LRS1 y LRS2 de la Red Argentina de Emisoras Splendid". **INT-SIG:** 4 notes on electronic gong. **V.** by QSL-card.
2) Cerrito 941, Buenos Aires. **Te:** 42-9661. **L.P:** Dir. Gen: E. Narboni. Dir. Adm: M. Domingo B. Dir. Tec: M. Koelbe. **D.Prgr:** 09.45–05.15. **N:** 10.00, 11.00, 15.00, 16.00, 20.00, 22.00, 01.00, 03.00, 04.00. (6090 & 11780kc partly relaying R. Nacional).
ANN: "Transmite LR3 R. Belgrano de Buenos Aires, con sus ondas cortas LRY1, LRY2 y su circuito de emisoras del Interior", **INT-SIG:** 4 notes on vibraphone. **V.** by QSL-card.
3) Maipú 555, Buenos Aires. **L.P:** Dir: R. Medina. Dir. Tec: C. Cutler. **D.Prgr:** 10.00–07.00. **ANN:** LR1, R. El Mundo de Buenos Aires y su Red Azul y Blanca de Emisoras Argentina". – **INT-SIG:** Gong. **V.** by QSL-card.

Medium Waves: D.Prgr's 11.00–05.00 exc. where indicated.
4) **R. Colon,** Mendoza 369, San Juan. **L.P:** Dir: A. Graffigna. **D.Prgr:** 10.30–05.30. **V.** by letter. Recordings accepted.
5) **R. Concordia,** *La Rioja 622, Concordia, Entre Rios.* **L.P:** *Dir:* C. Pinola. **D.Prgr:** 10.30–06.00 – 6) **R. Univ. de Córdoba,** Rivera Indarte 170, Córdoba. **L.P:** Dir: F. Garzón M. **D.Prgr:** 14.00–04.30 – 7) **R. Independencia,** Rivadavia 118, Tucumán. **L.P:** Dir: L. F. Graus. **D.Prgr:** 11.30–05.00 – 8) **R. Porteña,** Azauénaga 1625, Buenos Aires. **L.P:** Dir: T. Bidegain. **D.Prgr:** 24 h – 9) **R. Bariloche,** San Carlos de Bariloche, Rio Negro. **L.P:** Dir: O. M. Nazardin. **D.Prgr:** 12.00–04.30.
10) **R. Rivadavia,** Arenales 2467, Buenos Aires. **L.P:** Dir: J. Monk. **D.Prgr:** 24 h – 11) **R. La Rioja,** Mitre 743, La Rioja. **L.P:** B. M. Fallado. **D.Prgr:** 11.55–05.00 – 12) **R. Comodoro Rivadavia,** Moreno 765, Comodoro, Rivadavia. **L.P:** Dir: T. Gonzalo. **D.Prgr:** 10.00–04.30 – 13) **R. Villa Mercedes,** Balcarce 470, Villa Mercedes, San Luis. **L.P:** L. Urtubey. **D.Prgr:** 10.55–04.00 – 14) **R. Mar del Plata,** Córdoba *1861, Mar del Plata.* **L.P:** *Dir:* E. *Marin* P. **D.Prgr:** *24 h.*
15) **R. Provincia de Corrientes,** Rioja 743, Corrientes. **L.P:** Dir: J. F. Gomez. **D.Prgr:** 10.00–04.30 – 16) **R. Rio Gallegos,** Av. San Martin 461, Rio Gallegos, Santa Cruz. **L.P:** A. R. Segovia. **D.Prgr:** 13.00–04.00 – 17) **R. Nihuil,** Rioja 1239, Mendoza. **L.P:** Dir: G. F. Sánchez C. **D.Prgr:** 10.00–06.00 – 18) **R. de Cuyo,** Av. San Martin y G. ral Paz, Mendoza. **L.P:** Dir: M. Fernandez R. **D.Prgr:** 24 h – 19) **R. Catamarca,** Rivadavia 741, Catamarca. **L.P:** Dir: A. I. Delphino. **D.Prgr:** 11.55–04.05.
20) **R. Libertador,** Rioja 1484, Mendoza. **L.P:** F. Funes V. **D.Prgr:** 10.00–05.30 – 21) **R. Mitre,** Arenales 1925, Buenos Aires. **L.P:** Dir: F. Ferretti. **D.Prgr:** 24 h – 22) **R. Bahia Blanca,** Sarmiento 54, Bahia Blanca. **L.P:** Dir: D. J. de Massot. **D.Prgr:** 10.00–08.00 – 23) **R. Splendid,** J. J. de Urquiza 585, Presidencia Roque Saenz Peña. **L.P:** Dir: M. Alberti. **D.Prgr:** 10.00–04.30 – 24) **R. Rosario,** Córdoba 1825, Rosario. **L.P:** Dir: H. Pavia. **D.Prgr:** 10.00–05.00.
25) **R. Güemes,** Dean Funes 28, Salta. **L.P:** Dir: J. Bardesi. **D.Prgr:** 10.30–05.00 – 26) **R. San Rafael,** Irigoyen y Francia, San Rafael, Mendoza. **L.P:** Dir: C. G. Balmaceda. **D.Prgr:** 10.30–05.00 – 27) **R. General Madariaga,** Paso de los Libros, Corrientes. **L.P:** Dir: L. C. Lucere. **D.Prgr:** 11.00–04.00 – 28) **R. Tucumán,** Mendoza 273, Tucumán. **L.P:** Dir: J. Dip. **D.Prgr:** 10.00–05.00 – 29) **R. Jujuy,** Ramirez de Velazco 253, Jujuy. **L.P:** Dir: J. H. Pasin B.
30) **R. La Voz de la Libertad,** Maipú 166, Córdoba. **L.P:** Dir: D. D. de Aguero. **D.Prgr:** 09.30–04.30 – 31) **R. Excelsior,** Rivadavia 827, Buenos Aires. **L.P:** Dir: C. Iglesias. **D.Prgr:** 10.00–05.00 – 32) **R. Misiones,** Bolivár 322, Posadas, Misiones. **L.P:** Dir: C. Madelaire. **D.Prgr:** 24 h – 33) **R.** Ranquel, Colón 78, Rio Cuarto, Córdoba. **L.P:** Dir: O. M. Reynero, **D.Prgr:** 10.00–04.30 – 34) **R. Libertad,** Florida 165, Buenos Aires. **L.P:** Dir: V. Romay. **D.Prgr:** 11.00–07.00.
35) **R. Chaco,** 9 de Julio 1855, Resistencia, Chaco. **L.P:** Dir: J. Gesterfield. **D.Prgr:** 10.00–05.00 – 36) **R. Sarmiento,** Mendoza 466, San Juan. **L.P:** Dir: J. A. Ciriani. **D.Prgr:** 10.30–05.00 – 37) **R, Argentina,** Santa Fé 2043, Buenos Aires. **L.P:** Dir: E. Carreira. **D.Prgr:** 11.00–06.00 – 38) **R. General San Martin,** Alsina 247, Bahia Blanca. **L.P:** Dir: J. R. Garmendia – 39) **R. Splendid,** Juan B. Alberdi 189, Neuquén. **L.P:** Dir: R. Sande. **D.Prgr:** 11.00–04.30.
40) **R. del Norte,** Libertad 251, Santiago del Estero. **L.P:** Dir: J. E. Navarro. **D.Prgr:** 11.00–04.00 – 41) **R. Atlántica,** San Martin 2583, Mar del Plata. **L.P:** Dir: M. Emilio S. **D.Prgr:** 24 h. **V.** by letter – 42) **R. Cerealista,** Balcarce 840, Rosario. **L.P:** Dir: C. Mac Guire – 43) **R. Antártida,** Arenales 1925, Buenos Aires. **L.P:** Dir: F. Ferretti. **D.Prgr:** 10.00–03.00 – 44) **R. Splendid Tucumán,** Mendoza 225, Tucumán. **L.P:** Dir: E. Valey. **D.Prgr:** 10.55–06.00.
45) **R. Azul,** Av. Mitre 819, Azul. **L.P:** Dir: J. Borrero – 46) **R. Genaro Berón de Astrada,** Mariano I. Lloza 231, Goya, Corrientes. **L.P:** Dir: D. E. Mariño. **D.Prgr:** 10.55–03.57 – 47) **R. Córdoba,** San Martin 60, Córdoba. **L.P:** Dir: L. Fernando F – 48) **R. Splendid Rosario,** Santa Fé 1388, Rosario. **L.P:** Dir: P. Spoletti. **D.Prgr:** 10.00–07.00 – 49) **R. del Sur,** Lamadrid 116, Bahia Blanca. **L.P:** Dir: H. Long. **D.Prgr:** 10.30–04.00.
50) **R. San Luis,** Rivadavia 563, San Luis. **L.P:** Dir: J. M. Barbosa. **D.Prgr:** 11.00–04.00 – 51) **R. Golfo Nuevo,** B. Mitre y Estivariz, Puerto Madryn, Chubut. **L.P:** Dir: P. Oscar C. **D.Prgr:** 11.00–04.00 – 52) **R. Santa Fé,** San Martin 2685, Santa Fé. **L.P:** Dir: M. Bobbio. **D.Prgr:** 24 h – 53) **R. Splendid,** Onésimo Leguizamón 269, Cencepción del Uruguay, Entre Rios. **L.P:** Dir: M. Neyra. **D.Prgr:** 10.30–04.00 – 54) **R. Necochea,** Belgrano 3222, Necochea. **L.P:** Dir: M. R. G. de Rico. **D.Prgr:** 10.30–05.00.
55) **R. General Urquiza,** Rivadavia 126, Parana, Entre Rios. **L.P:** Dir: G. Uranga. **D.Prgr:** 10.00–04.00 – 56) **Radioemisora del Oeste,** Cas. 36, Trenque, Lauquen. **L.P:** Dir: R. Saez. **D.Prgr:** 10.30–03.30 – 57) **R. América,** J. A. Pacheco de Melo 2178, Buenos Aires. **L.P:** Dir: C. Fernandez P. **D.Prgr:** 11.00–07.00 – 58) **R. Viedma,** Rivadavia 336, Viedma. **L.P:** Dir: O. Liccardi. **D.Prgr:** 12.00–04.00 – 59) **R. Tartagal,** *San Martin 245,* Tartagal, Salta. **L.P:** Dir: N. S. Martinez Gil. **D.Prgr:** 12.00–04.00.
60) **R. Rio Negro,** Reconquista 135, Villa Regina, Rio Negro. **L.P:** Dir: D. López – 61) **R. Obera,** Jujuy 81, Oberá, Misiones. **L.P:** Dir: H. Amable. **D.Prgr:** 10.00–04.00 – 62) **R. Cipolletti,** Cas. 14, Cipolletti, Rio Negro. **L.P:** Dir: A. Thome. **D.Prgr:** 11.00–04.30 – 63) **R. Golfo San Jorge,** Italia 947, Comodoro Rivadavia. **D.Prgr:** 11.00–*04.00 – 64)* **R. Orán,** *9 de Julio 163,* Orán, Salta. **L.P:** *Dir:* G. Bernad. **D.Prgr:** 12.00–04.00 – 65) **R. El Valle,** 25 de Mayo 880, General Roca, Rio Negro. **L.P:** Dir: F. Zarraga. **D.Prgr:** 11.00–04.30 – 66) **R. Chubut,** Italia 47, Trelew, Chubut. **L.P:** Dir: T. Boric. **D.Prgr:** 11.00–04.30 – 67) **R. Eldorado,** San Martín 1924, Eldorado, Misiones. **L.P:** Dir: M. A. Murad. **D.Prgr:** 10.00–02.00.

BOLIVIA

L.T: GMT – 4 h – **Pr.L:** Spanish.
DIRECCION GENERAL DE RADIOCOMUNICACIONES
Departamento de Radiodifusion, La Paz.
L.P: Dir. Gen: H. Valdivia.

ASOCIACION BOLIVIANA DE RADIODIFUSORAS,
Casilla 586, La Paz – **L.P:** Pres: R. Salmón.
STATIONS: All st's comm. exc. 11), 20) (Rel), 28) (Gov), 31) (Cultural), 25), 34), 45).

Short Waves: *=inactive.

	Call	kc	m	kW	Name & h of tr.
1)	CP109	3340	89.81	1	R. Nacional Huanuni
2)	CP103	3350	89.55	1	R. 27 de Diciembre, Villa Montes
3)	CP85	3370	89.02	0.5	R. Universidad, Tarija
4)	CP62	4760	63.03	5	R. Bolivia, Oruro
5)	CP56	4775	62.84	0.1	R. Onkoi, Concepción
6)	CP84	4775	62.84	1	R. Los Andes, Tarija: 10.00–22.00
7)	CP74	4785	62.70	1	R. Indoamérica, Potosi: 11.30–03.00
8)	CP73	4795	62.57	1	R. Nueva América, La Paz: 10.55–18.30, 22.00–05.00
9)	CP70	4825	62.18	1	R. Grigota, Sta. Cruz: 10.00–03.00
10)	CP66	4845	61.92	1	R. Centenario, Sta. Cruz
11)	CP59	4855	61.79	1	R. Cobija, Cobija: 10.00–03.00
12)	CP105	4885	61.45	0.5	R. Ibare, Trinidad: 14.00–17.30, 21.00–01.00
13)	CP77	4885	61.45	1.5	R. Sararenda, Camiri: 20.00–04.00
14)	CP88	4915	61.03	1	R. Amboro, Sta. Cruz
15)	CP75	4985	60.75	10	La Cruz del Sur, La Paz
16)	CP48	5015	59.82	1	R. Universo, La Paz
17)	CP106	5025	59.70	1	R. Litoral, Cochabamba
18)	CP87	5055	59.35	5	R.San Rafael, Cochabamba: 10.00–03.00
19)	CP71	5872	51.03		R. San José, San José
20)	CP60	5955	50.38	1	R. Pío XII, Siglo XX: 08.30–13.30, 14.30–19.00, 20.45–04.00
21)	CP44	5975	50.21	1	R. Nacional LAB, Cochabamba: 12.00–03.00
22)	CP41	5995	50.04	1	R. Loyola, Sucre: 12.00–22.00
23)	CP18	6055	49.55	1	R. El Condor, Oruro: 12.00–18.00, 22.00–03.00
24)	CP15	6125	48.98	1	R. El Condor, La Paz: 12.00–03.00
25)	CP30	6135	48.94	1	R. Sta. Cruz, Sta. Cruz: 15.00–18.00, 22.00–03.00
26)	CP81	6140	48.86	0.5	R. Luis de Fuentes, Tarija: 11.30–23.00, 00.30–03.30
27)	CP12	6155	48.74	1	R. Fides, La Paz: 14.00–16.00, 21.00–03.00
28)	CP9	6185	48.50	1	R. Amauta, La Paz: 12.00–18.00, 21.00–03.00
29)	CP38	9505a	31.56	5	R. Altiplano, La Paz: 12.00–23.00
30)	CP22	*9605	31.23	5	R. Prefectura, Potosí
31)	CP5	9555	31.40	10	Emisora del Estado, La Paz: 10.00–13.00, 16.00–22.00
32)	CP21	9715	30.88	1	R. La Plata, Sucre: 12.00–18.00, 22.00–03.00
31)	CP7	*11765	25.50	10	Emisora del Estado, La Paz
15)	CP39	*11775	25.48	10	La Cruz del Sur, La Paz
31)	CP96	*15155	19.80	10	Emisora del Estado, La Paz
31)	CP86	*15300	19.60	10	Emisora del Estado, La Paz
31)	CP94	*17865	16.80	10	Emisora del Estado, La Paz

a) reported on 5045kc.

Medium Waves: °=also on Short Wave.

	Call	kc	kW		Call	kc	kW		Call	kc	kW
33)	CP63	620	1	41)	CP67	1200	1	46)	CP36	1330	0.25
34)	CP34	680	5	32)	CP54	°1250	0.25	47)	CP106	1330	0.25
15)	CP27	°730	5	11)	CP47	°1250	0.25	9)	CP24	°1340	0.25
16)	CP46	°780	0.25	13)	CP17	°1250	0.25	48)	CP3	1390	1
35)	CP56	780	0.25	6)	CP16	°1250	0.25	49)	CP49	1420	1
36)	CP108	780	0.25	7)	CP53	°1250	0.25	50)	CP104	1440	0.5
37)	CP52	780	0.25	21)	CP69	°1250	0.25	51)	CP107	1440	0.25
29)	CP35	°820	0.25	42)	CP14	1250	0.25	4)	CP61	°1450	1
24)	CP20	°900	0.25	43)	CP65	1250	0.25	8)	CP8	°1470	1
38)	CP28	900	0.25	12)	CP100	°1250	0.25	52)	CP1	1510	0.25
16)	CP72	°910	0.25	14)	CP26	°1250	0.25	17)	CP80	°1510	0.25
28)	CP11	°960	0.25	44)	CP55	1270	0.25	53)	CP76	1510	0.25
25)	CP32	°960	0.25	22)	CP51	°1300	0.25	54)	CP79	1510	0.25
31)	CP4	°1020	26	27)	CP29	°1300	0.25	2)	CP102	°1510	0.25
10)	CP25	°1160	0.25	18)	CP68	°1300	1	20)	CP50	°1550	1
39)	CP78	1160	0.25	45)	CP45	1330	0.25	55)	CP83	1550	0.5
40)	CP19	1160	0.5								

Short Waves:

1) Viloco – 2) Correo Central, Villa Montes – 3) Tarija – 4) Correo Central, Oruro – 5) Correo Central, Concepción .

6) 15 de Abril 828, Tarija – 7) Ca. Matos 35. Potosi.

8) Cas. 2431, La Paz. **Te:** 2-5883. **L.P:** Dir. Gen: R. Salmon. **D.Prgr:** N: 12.00, 17.00, 24.00.

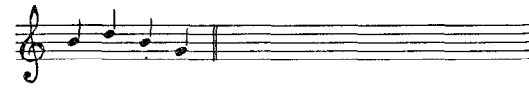
9) Cas. 203, Sta Cruz. **Te:** 309. **Cable:** Grigota. **L.P:** Dir. Gen: D. Arteaga F. **D.Prgr: N:** 11.35, 16.15, 17.30, 24.00. **Ann:** "CP24 y CP70 Estaciones Radiofonicas Grigota, La Voz del Oriente Boliviano". **V.** by letter.

10) Argamosa 2, Sta Cruz – 11) Centre Accion Pandina, Cobija – 12) Correo Central, Trinidad.

13) Correo Central Soc. Ltda, Sararenda Camiri. **L.P:** Dir. Gen: H. Eyzaguirre S. **V.** by letter. Recordings accepted.

14) Libertad 348, Santa Cruz.

15) Cajón 1408, La Paz. **Te:** 2-5578. **L.P:** Dir. Gen: F. Fortes. Dir. Prgr: S. Vargas. **D.Prgr:** 11.00–14.00, 16.00–18.00, 22.00–02.45. **N:** 12.00, 17.00, 00.00, 02.00. **English:** D 02.30(or 02.40); "**E by R**" (BBC), 23.00. **German:** 11.30, Sun 12.00. **Ann: E:** "This is CP27, the Southern Cross Radio". Sp: "R. La Cruz del Sur, Luz que señala el camino de la vida". **Int-Sig:** Opens with "God of our Fathers", closes with "The Heavens are telling".



V. by QSL-card. Recordings accepted. **Pub:** Prgr. schedule free.

16) Casilla 232, La Paz. **Te:** 2-2995. **Cable:** Dico. **L.P:** Dir. Gen: J. Blanco G. Dir. Tec: A. Berthin M. **V.** by letter. **FM:** 92Mc.

17) Casilla 1009, Cochabamba – 18) Correo Central, Cochabamba.

19) Cas. 314 y 433, San José, Oruro. **Te:** 50150. **L.P:** Dir. Gen: E. Mendizabal E. **V.** by letter.

20) Cas. 434. **L.P:** Dir. Gen: Rev. Padre G. Dicaire O.M.I.Dir. Tec: V. Fernández C. Dir. Prgr: M. Otero. **D.Prgr: N.** in **Spanish:** 11.20, 13.00, 15.00, 16.20, 18.00, 23.20. **N.** in **Quechua:** 16.03. **V.** by letter. Recordings accepted.

21) Lloyd Aéro Boliviano, Cochabamba.

22) Cas. 155, Sucre. **Te:** 1677. **Cable:** Radioloyola. **L.P:** Dir. Gen: R. Aguilo. Dir. Tec: J. Lora. **D.Prgr:** 11.00–03.00(m.w.). **N:** 12.00, 14.00, 15.30, 16.00, 16.45, 18.00, 22.00, 02.00. **Ann:** "Radioemisoras Loyola, Voluntad Católica de Bolivia". **V.** by letter. Recordings accepted – 23) La Plata 1139, Oruro.

24) Av. Camacho 1471, La Paz. **Te:** 2-3070. **D.Prgr:** N: W 11.30, 16.30, 23.30, 02.30. **Ann:** "Estas son CP15 y CP20 estaciones de ondas cortas y larga de R. El Condor, La Voz Ferrovario, desde La Paz, Bolivia". **V.** by letter.

25) Ml. Ig. Salvatierra 234, Sta Cruz – 26) Cas. 125, Tarija.

27) Cas. 283, La Paz. **L.P:** Dir. Gen: J. Gramunt. **D.Prgr:** N: 12.00, 15.30, 16.45, 17.30, 23.00, 24.00, 01.00. **Ann:** "R. Fides de La Paz, La Voz Católica de Bolivia".

28) Cas. 586, La Paz – 29) Av. Camacho de 1468, La Paz. **Te:** 10906.

30) Prefectura, Potosi.

31) Ca. Ayacucho 467, La Paz. **Te:** 29686. **L.P:** Dir. Gen: M. Ortiz O. Dir. Tec: F. Ballivián. **D.Prgr:** 10.00–04.00. **Ann:** "Desde La Paz, República de Bolivia, transmite CP4 y CP5, Emisora del Estado, La Voz de Bolivia". **V.** by letter. Recordings accepted. **F.Pl:** 4 relay st's on 1020kc.

32) Plaza 25 de Mayo 41, La Plata, Sucre.

Medium Waves:

32) **R. Huayna Potosi,** Soc. Colectiva, H. Potosi, La Paz.

33) **R. San Gabriel,** Cas. 1071, La Paz. **V.** by letter or QSL-card.

34) **R. Mendez,** Av. 6 de Agosto 2008, La Paz.

35) **La Voz Minera,** Comando Movimiento Nacionalista Revolucionario Telemayo (Dep. Potosi).

36) **R. Independensia,** Correo Central, Quillacollo.

37) **R. Potosi,** Ca. Sucre 30, Potosi – 38) **R. Cochabamba,** Cas. 886, Cochabamba – 39) **R. Tunari,** Cochabamba. **L.P:** Dir. R. P. Luis Falch.

40) **R. Aspiazu,** Indaburo 971, La Paz – 41) **R. Splendid,** Venezia 5, La Paz – 42) **Emisoras "Unidas Ltda",** Av. Camacho 1324, La Paz.

43) **R. Oruro,** *Correo Central, Oruro.* **D.Prgr:** 14.00–19.00, 21.00–03.00 – 44) **R. Universidad,** Universidad Técnica, Oruro.

45) **R. Cultura,** Ca. 886, Cochabamba – 46) **R. Mercurio,** Correo Central, Oruro – 47) **R. Trinidad,** Correo Central, Trinidad – 48) **R. Nacional,** Cap. Castrillo 460, La Paz – 49) **R. Centro,** Santibañez 3420, Cochabamba.

50) **R. Oriente,** Correo Central, Camiri – 51) **R. Yaguari,** Correo Central, Vallegrande – 52) **R. Chuquisaca,** Cochabamba 154, La Paz.

53) **La Voz Católica,** Vicariato Apostólico, Concepción.

54) **La Voz Nacional,** Correo Central, Tarija – 55) **R. Norte,** Correo Central, Montero.

BRAZIL

L.T: Eastern (Coastal): GMT–3 h (Su: GMT–2 h). Western: GMT –4 h (Su: GMT – 3 h). Acre: GMT – 5 h (Su: GMT – 4 h) – **Pr.L:** Portuguese.

CONSELHO NACIONAL DE TELECOMUNIÇACÕES (National Council of Telecommunications), Av. Pres. Wilson, 164-10° andar, Rio de Janeiro.

ASSOCIAÇÃO BRASILEIRA DE EMISSORAS DE RADIO E TELEVISAO

ADDR: Av. Rio Branco 4, salas 901–903, Rio de Janeiro, G.B. **Te:** 43-87-26. **Cable:** Abertrio – **L.P:** Pres: Dr. J. de Medeiros Calmon. Vice Pres: Dr. F. Alcaras Gomes, A. Ziller. Exec. Dir: R. Tavares. Secr: F. Parente.

St's belonging to A.B.E.R.T: 1), 6), 7), 8), 10), 11), 16), 17), 19), 20), 21), 23), 27), 29), 30), 31), 32), 33), 36), 37), 38), 40), 41), 44), 46), 47),

48), 49), 50), 51), 52), 53), 55), 57), 58), 59), 62), 63), 64), 66), 67), 68), 70), 71), 72), 73), 75), 76), 77), 79), 80), 81), 83), 88), 90), 91), 94), 95), 96), 101), 102), 103), 104), 106), 109),116), 117), 118), 120), 121), 122), 124), 125) + 236 m.w. st's.

DIARIOS E EMISSORAS ASSOCIADOS

Internat. Relations Dept, Directorate for Production & Technical Assistance: Rua S. Cabral 103, Rio de Janeiro, G.B. **Te:** 22-0182. **Cable:** Silapress. **Telex:** 031.380 – **L.P:** Dir: Dr. José de Almeida Castro. Dep. Dir: P. Leal.
St's belonging to Diarios Associados: 21), 29), 31), 55), 62), 71), 88), 94), 103), 104), 108), 120), 122), 124) + 4 m.w. st's.

All prgr. details are subject to alterations without notice. **NB:** All st's carry "A voz do Brazil" at 22.00.

STATIONS: Short Waves: *=inactive.

	Call	kc	m	kW	Name	h of tr.
1)	ZYV30	2130	140.9	0.5	R.Dif. Brasileira, Uberlandia	09.00–02.00
2)	ZYB	2350	127.6	1	R.Dif. Itacoatiara	10.00–01.00
3)		2360	127.1	0.25	R.Dif. Parintins	10.00–01.00
4)		2360	127.1	1	R.Cult. Caruarú	10.00–24.00
5)		*2370	126.1	0.25	R.Cl. Fluminense, Sao João de Meriti	
6)		2380	126.0	0.25	R. Educadora de Limeira	09.00–02.00
7)	ZYV71	2390	125.5	0.5	R. Por Um Mundo Melhor, G. Valadares	09.00–03.00
8)		*2390	125.5	0.5	R. Cultura de Monte Alto, Jaboticabal	
9)		2400	125.0	0.1	R. Mossoró	09.00–03.00
10)		2400	125.0	0.5	R.Dif. de Amparo	08.30–24.00
11)	ZYW32	2400	125.0	0.5	R. Carajá, Anápolis	09.00–01.00
12)		2410	124.1	1	R. Sirena, Leopoldina	11.00–01.00
12a)		2410	124.1	1	R.Emissora Educação Rural, Santarem	09.00–03.00
13)		2420	124.0	0.5	R. São Carlos	09.00–04.00
14)		2420	124.0	0.25	R. Carolina	11.00–24.00
15)		*2430	123.5	0.25	Dif. Rio Bonito	
16)	ZYR231	2450	122.4	0.5	R.Cultura de Araçatuba	08.00–04.00
17)	ZYR99	2460	122.0	0.5	R. Cacique de Sorocaba	08.00–04.00
18)	ZYR	2480	121.0	1	R. Bragança, Bragança Paulista	09.00–02.00
19)	ZYN62	3255	92.17	0.5	R.Cl. de Marilia	10.00–02.30
20)	ZYR92	3265	91.87	4	R. Ribeirao Preto	08.30–02.30
21)	ZYK21	3265	91.87	1	R.Tamandaré, Recife	09.00–04.00
22)	ZYR31	3275	91.60	1	R.Cl. Bauru	09.00–02.00
23)	ZYR89	3285	91.32	1	R.Aparecida	09.00–03.00
24)		3285	91.32	1	Emis. da Educacão Rural, Natal	08.00–02.00
25)	ZYV75	3295	91.00	0.5	R. Educ. de Uberlandia	08.45–03.00
26)	ZYH31	3305	90.77	1	R. Educadora do Cariri, Crato	11.00–24.00
27)	ZYV63	3315	90.50	0.5	R. Itatiaia, Belo Horizonte	09.00–03.00
28)	ZYR208	3325	90.23	0.1	R.Dif. Guarulhos	09.00–01.00
29)	ZYJ21	3325	90.23	2	R. Borborema, Campina Grande	08.30–03.00
30)	ZYR59	3335	89.95	0.5	Vóz do Sertão, Pres. Prudente	12.00–17.00
31)	ZYE21	3335	89.95	1	R. Marajoára, Belem	09.00–03.00
32)		3345	89.68	1	R. Alvorada de Londrina	10.00–04.00
33)	ZYS45	3365	89.15	0.5	Dif. do Paraná, Londrina	09.00–01.00
34)	ZYK28	3375	88.88	10	R. Olinda Pernambuco	03.00–24.00
35)		3385	88.63	0.5	R.Cl. Teresina	11.00–02.00
36)	ZYA41	*3385	88.63	1.5	R. Eldorado, Rio	
37)		3395	88.37	1	R. Tapuyo de Mossoró	09.55–03.00
38)	ZYF24	4710	63.69	0.1	R.Dif. do Maranhão, São Luiz	09.00–01.00
39)	ZYY3	4735	63.35	1.5	R. Brazil, Campinas	09.00–02.00
40)	ZYN37	4765	62.96	1	R. Feira de Santana	09.50–04.00
41)	ZYH29	4775	62.84	5	R. Dragão do Mar, Fortaleza	09.00–01.00
42)	ZYR81	4775	62.84	5	R. Progresso de São Paulo	09.00–01.00
43)	ZYY20	4785	62.70	1	R. Cultura Caiari, Porto Velho	11.00–04.30
44)	ZYM8	4785	62.70	0.5	R. Ribamar, São Luiz	11.00–02.00
45)	ZYU25	*4795	62.57	1	R. Cultura de Cambuquira	
46)	PRI4	4795	62.57	2	R. Tabajara, João Pessoa	09.00–02.00
47)	ZYP27	4795	62.57	0.5	R. Copacabana	09.00–03.00
48)	ZYS8	4805	62.43	5	R.Dif. de Amazonas, Manaus	09.00–02.00
49)	ZYR33	4815	62.31	1	R.Dif. Petropolis	10.00–04.00
50)	ZYP33	4815	62.31	1	R. Iracema de Fortaleza	09.00–03.00
51)	ZYE7	4825	62.18	0.5	R. Educadora de Parnaiba	10.00–02.00
52)	ZYV37	4835	62.05	0.5	R. Triangulo Mineiro, Uberaba	09.30–02.30
53)	ZYV56	4825	62.18	0.5	R.Cl. de Varginha	11.00–01.00
54)	ZYA	4835	62.05	1	R.Dif. Roraima, Boa Vista	11.00–16.00, 22.00–03.00
55)	ZYU8	4845	61.92	1	R.Dif. Teresina	08.00–03.00
56)	ZYR61	4855	61.79	1	R.Dif. Taubaté	09.00–03.00
57)	PRC5	4865	61.66	2.5	R.Cl. do Pará, Belem	09.00–12.00, 15.00–03.00
58)	ZYZ30	4875	61.54	1	R. Jornal do Brasil, Rio de Janeiro	08.30–05.00
59)	ZYG26	4885	61.41	1	R. Pioneira de Teresina	07.45–03.00
60)	ZYD9	4885	61.41	1	R. Acreana, Rio Branco	12.00–02.00
61)	ZYV50	4885	61.45	5	R. Cultura de Poços de Caldas	10.00–01.00
62)	PRF6	4895	61.29	5	R. Baré, Manaus	09.00–11.00 14.00–16.00, 22.00–03.00
63)	ZYN22	4895	61.28	1	R. Bahia, Salvador	09.00–04.00
64)	ZYZ20	4905	61.16	5	R. Relogio Federal, Rio de Janeiro	00.00–24.00
65)	ZYR60	4915	61.04	1	R. Cultura de Araraquara	09.00–03.00
66)	ZYE2	4915	61.04	2	R.Dif. Macapá, Amapá	12.00–01.00
67)	ZYL20	4925	60.90	1	Emis. Rio São Francisco, Penedo	12.00–01.00
68)	ZYV36	4925	60.90	1	R. Industrial de Juiz de Fóra	09.00–02.00
69)	ZYA6	4925	60.90	1	R. Iracema, Sobral	09.00–02.00
70)		*4935	60.80	0.5	Lins R.Clube Lins	
71)	ZYI21	4935	60.80	1	R. Poti, Natal	08.55–03.00
72)	ZYO25	4945	60.67	1	R. Capixaba, Vitoria	10.30–02.00
73)	ZYE22	4945	60.67	0.25	R.Dif. Mearim, Caxias do Suc	11.00–01.00
74)	ZYE23	4945	60.67	1	R. Educadora de Bragança	09.00–01.00
75)	PRF7	*4955	60.54	2	R. Cultura de Campos	
76)		4955	60.54		R. Caiari, Porto Velho	09.00–01.30
77)	ZYY9	4975	60.30	5/2.5	R. Timbira, São Luiz	12.00–03.00
47)	ZYP27	4975	60.30	1	R. Copacabana	09.00–03.00
78)	ZYZ5	4985	60.18	1.5	R. A Voz do Oeste, Cuiabá	10.00–02.00
79)	ZYX9	4995	60.06	5	R. Brasil Central, Goiania	08.00–03.00
80)	PRC8	*5015	59.80	1	R. Guanabara, Rio de Janeiro	
81)	ZYY24	5025	59.70	1	R.Dif. de Aquidauana	12.00–02.00
82)		5025	59.70	1	R.Dif. A Voz da Amazonia	
83)	ZYK41	5025	59.70	1	Emis. Rural, Voz do São Francisco, Petrolina	08.55–03.00
84)	ZYW22	5035	59.58	1	R.Anhanguera, Goiania	09.00–03.00
85)	PRI4	5035	59.58	0.5	R. Espirito Santo, Vitoria	12.00–01.00
86)	ZYP23	5045	59.46	1	R. Imperial, Petrópolis	11.00–01.00
87)	ZYO21	5055	59.35	2	R. Cult. de Cuiabá	11.00–02.00
88)	ZYO23	5055	59.35	1	R. Vitória 15.00–18.00,	21.00–03.00
89)	ZYR226	5955	50.38	50	R. Gazeta de São Paulo	09.00–04.00
90)	ZYU60	5965	50.28	7.5	R.Guaiba, Porto Alegre	09.00–03.00
91)	ZYT44	5975	50.21	10	R. Guarujá, Florianopolis	11.00–04.00
92)	PRL5	5990	50.04	7.5	R. Ministerio da Educação Rio de Janeiro	09.00–03.00
93)	PRK5	6000	50.00	25	R. Inconfidencia, Belo Horizonte	11.00–04.00
94)	PRA8	6015	49.88	5	R.Cl. de Pernambuco, Recife	07.55–04.00
95)	ZYR63	6025	49.79	10	Emis. Piratininga, São Paulo	11.00–04.00
96)	ZYZ26	6035	49.71	10	R. Globo, Rio de Janeiro	08.00–04.00
97)	ZYS33	6045	49.63	25	R.Cl. Paranaense, Curitiba	07.00–03.00
98)	PRB21	6055	49.55	10	R. Panamericana, São Paulo	12.00–01.00
99)	ZYZ31	*6065	49.46	7.5	R. Rural Brasileira,	under repair
100)	PRL8	6065	49.46	10	R. Nacional, Brasilia	08.00 03.00
101)	ZYK2	6085	49.30	15	R. Jornal do Comércio, Recife	09.00–03.00
102)	ZYB7	6095	49.22	25	R.Dif. São Paulo	09.00–03.00
103)	ZYN6	6105	49.14	5	R.Cl. Ceará, Fortaleza	09.00–21.00
104)	ZYC7	6115	49.06	100	R. Tupi, Rio de Janeiro	09.00–02.00
105)	PRG9	6125	48.98	7.5	R. Nacional, São Paulo	09.00–03.00
106)	PRC21	6135	48.90	10	R. TV Gaucha, Porto Alegre	09.00–04.00

	Call	kc	m	kW	Name	h of tr.
107)	PRL9	6145	48.82	50	R. Nacional, Rio	08.00–05.00
121)	ZYR58	6165	48.66	7.5	R. Cultura São Paulo	09.00–04.00
108)	ZYV74	6175	48.58	10	R. Guarani, Belo Horizonte	24 h
109)	ZYR77	6185	49.58	10	R. Bandeirantes, São Paulo	08.30–03.00
110)	PRD21	6195	48.43	10	Emis. Continental	07.30–04.30
100)	PSL	7935	37.81	20	Agencia Nacional	22.30–23.30
111)	PRN9	*9295	32.28	2.5	R.Dif. Departamento Segurança	
98)	PRB22	9505	31.56	7.5/50	R. Record, São Paulo	09.00–03.30
112)	PRD5	*9515	31.53	1	R. Roquete Pinto	
113)	ZYZ43	9545	31.43	7.5	R. Emis. Paranaense, Curitiba	10.00–03.00
101)	ZYK3	*9565	31.37	15	R. Jornal do Comercio, Recife	
114)	ZYZ27	*9575	31.33	10	R. Mayrink Veiga, Rio de Janeiro	
115)	ZYR56	9585	31.30	50	R. Exelcior, São Paulo	10.00–04.00
63)	ZYN29	9595	31.27	20	R. Cultura de Bahia	09.00–04.00
104)	ZYC8	9610	31.22	10	R. Tamoio, Rio de Janeiro	08.00–05.00
115)	ZYR96	9620	31.19	10	R. 9 de Julho, São Paulo	10.00–04.30
23)	ZYR83	9635	31.14	7.5	R. Aparecida	09.00–03.00
95)	ZYR64	*9635	31.14	10	R. Piratininga, São Paulo	
61)	ZYV40	9645	31.10	7.5	R. Cultura de Poços de Caldas	12.00–24.00
116)		*9665	31.04		R. Rio, Rio de Janeiro	
100)	PRL8	9665	31.04	10	R. Nacional, Brasilia	09.00–04.00
117)	ZYT29	9675	31.01	10	R. Diario da Manha, Florianopolis	09.00–03.00
89)	ZYR227	9685	30.98	7.5	R. Gazeta	09.00–04.00
118)	ZYB22	9695	30.94	7.5	R. Rio Mar, Manaus	13.00–01.00
119)	ZYA24	9705	30.91	10	R.Mauá, Rio de Janeiro	07.00–05.00
107)	PRL7	9720	30.86	50	R Nacional, Rio	08.00–04.00
120)	ZYU59	9730	30.83	7.5	R. Farroupilha. Porto Alegre	08.55–03.00
121)	ZYR57	9745	30.79	7.5	R. Cultura São Paulo	09.00–03.00
79)	ZYW23	*9755	30.70	7.5	R. Brasil Central	
83)	ZYW23	9755	30.70	1	R.Anhanguera, Goiania	12.00–01.00
92)	PRL4	9770	30.71	7.5	R. Ministerio da Educação, Rio de Janeiro	09.00–03.00
100)	PSH	10220	29.35	20	Agencia Nacional	22.30–23.30
100)	PRL8	11720	25.60	10	R. Nacional, Brasilia	08.00–03.00
122)	ZYW28	11735	25.56	7.5	R.Cl. de Goiania	11.00–02.00
95)	ZYR65	11745	25.54	10	R. Emis. Piratininga, São Paulo	09.00–04.00
102)	ZYB8	11755	25.52	25	R.Dif. São Paulo	09.00–03.00
114)	ZYZ28	*11775	25.48	10	R. Mayrink Veiga, Rio de Janeiro	
90)	ZYU61	11785	25.46	7.5	R. Guaiba	21.00–04.00
107)	PRL3	11795	25.43	10	R. Nacional, Rio	08.00–04.00
96)	ZYZ36	11805	25.41	10	R. Globo	08.00–04.00
79)	ZYW24	11815	25.39	7.5	R. Brasil Central, Goiania	08.00–03.00
101)	ZYK32	*11825	25.37	15	R. Jornal do Comercio, Recife	
123)	ZYA56	*11855	25.31	10	Rede Paranaense de Emisoras, Curitiba	
94)	PRA8	11865	25.28	10	R.Cl. Pernambuco	07.55–04.00
124)	ZYN32	11875	25.26	10	R. Soc. da Bahia, Salvador	08.30–03.00
119)	ZYZ25	*11885	25.22	10	R. Mauá	
106)	PRC23	11915	25.18	10	R. TV Gaucha, Porto Alegre	09.00–04.00
109)	ZYR78	11925	25.16	10	R. Bandeirantes	08.30–03.00
97)	ZYS35	11935	25.14	7.5	R.Cl. Paranaense	07.00–20.00
92)	PRL3	11950	25.10	7.5	R. Ministerio da Educação, Rio	09.00–03.00
98)	PRB24	11965	25.07	50	R. Record, São Paulo	09.00–03.00
100)	PUB25	12058	24.88	2	Agencia Nacional, São Paulo	
100)	PSF	14690	20.45	20	Agencia Nacional	22.30–23.30
99)	ZYZ32	*15105	19.86	7.5	R. Rural Brasileira: under repair	
125)	PRC2	*15115	19.85	7.5	R. Soc. Guiracá, Curitiba	
124)	ZYN31	*15125	19.83	10	R. Soc. da Bahia, Salvador	
98)	PRB23	15135	19.82	10	R. Panamericana	09.00–03.30
101)	ZYK33	15145	19.81	15	R. Jornal do Comercio, Recife	09.00–02.30
102)	ZYB9	15155	19.80	25	R.Dif. de São Paulo	09.00–03.00
103)	ZYN7	15165	19.78	5	R.Cl. do Ceará	21.00–03.00
126)		*15175	19.76	1	Emis. Tupanci, Pelotas	11.00–03.00
93)	PRK9	15190	19.75	10	R. Inconfidencia, Belo Horizonte	09.00–04.00
100)	ZYZ20	*15205	19.74	10	Agencia Nacional	
77)	ZYY9	*15215	19.71	2.5	R. Timbira, São Luiz	
63)	ZYN30	15225	19.70	10	R. Cultura da Bahia, Salvador	irr.
31)	ZYE21	15245	19.68	7.5	R. Marajoara, Belem	11.00–01.00
105)	PRG9	15265	19.66	50	R. Excelsior, São Paulo	irr.
107)	PRL8	15295	19.62	10	R. Nacional, Rio	08.00–04.00
89)	ZYR228	*15325	19.58	1	R. Gazeta de São Paulo	
120)	ZYU68	15335	19.56	7.5	R. Farroupilha, Porto Alegre	08.55–20.30
104)	ZYC9	15370	19.52	10	R. Tupi, Rio de Janeiro	08.00–05.00
127)	ZYR206	15415	19.46	1	R.Cl. Ribeirão Preto	12.00–01.00
100)	ZYN32	15445	19.43	10	R. Nacional de Brasilia	08.00–03.00
116)		*15445	19.43	50	R. Rio, Rio de Janeiro	
115)	ZYR97	17705	16.94	10	R.9 de Julho	irr.
128)	ZYR232	17725	16.93	1	R. Universitaria Santos Dumont, São Jose dos Campos	23.00–02.00
100)		*17775	16.90	10	Agencia Nacional, Brasilia	
100)		*17775	16.90	10	Agencia Nacional, Rio de Janeiro	
48)		17795	16.86	5	R.Dif. do Amazonas	10.00–01.00
121)	ZYR58	17815	16.82	10	R. Cultura, São Paulo	09.00–03.00
107)	PRL9	*17850	16.81	10	R. Nacional	
92)	PRL2	17875	16.79	7.5	R. Ministerio da Educação, Rio de Janeiro	09.00–03.00
100)	ZYZ41	*21490	14.50	10	Agencia Nacional, Brasilia	
100)		*21500	13.96	10	Agencia Nacional, Brasilia	
100)	ZYA65	*21580	13.90	10	Agencia Nacional, Brasilia	

Note: St's 111) & 114) are closed by the Federal Gov.

Medium Waves: °) also on shortwave

	Call	kc	kW
29)		°540	5
115)	ZYR98	°540	10
34)	ZYZ22	°550	10
129)	ZYN4	560	1/0.25
125)	ZYM5	°560	10
130)		580	10
131)	PRG5	580	1/0.5
132)	ZYM3	580	1/0.5
133)	ZYM25	580	1/0.5
134)	ZYD4	580	1/0.5
64)	ZYZ22	°590	1
120)	PRH2	°600	50
135)		620	10
98)	PRH7	°620	5/10
136)	ZYX25	630	10
137)	ZYV44	630	1
138)	ZYA3	630	1
139)	PRJ6	630	1
140)	ZYM	630	1
27)	ZYV29	°630	5
141)	ZYU37	630	1
142)	PRF9	640	2.5
143)	ZYM22	670	10/5
105)	ZYR56	°670	10
144)	ZYK26	680	1
145)	ZYS65	680	1
47)	ZYP20	°680	5
106)	PRC2	°680	10
41)	ZYH29	°690	10
146)	PRC7	690	25/10
33)	ZYS44	°690	0.25
147)	ZYW3	690	1
36)	ZYR213	°700	50
56)	ZYA8	°720	1
94)	PRA8	°720	0.25
90)	ZYU58	°720	50
148)		720	1/0.25
149)	ZYW53	730	1
150)		730	1
151)	ZYO9	730	1/0.25
152)	ZYR80	730	2
153)	ZYH8	730	1/0.25
83)	ZYK40	°730	5/1
88)	ZYO21	°730	1/0.25
124)	PRA4	°740	50
111)	PRN9	°760	2
101)	PRL6	°780	20/10
20)	ZYR79	°780	0.25
25)	ZYV38	°780	0.25
92)	PRA2	°800	25
154)	ZYT94	820	1
155)	ZYA4	820	1/0.25
156)	ZYK37	820	10
30)	PRI5	°820	0.25
7)	ZYV64	°840	1.25
109)	PRH9	°840	10
157)	ZYD8	840	10/5
158)	ZYT33	840	1/0.25
159)	PRA3	860	50
93)	PRI3	°880	50
160)	ZYU33	880	10
89)	PRA6	°890	10/5
21)	ZYK20	°890	20
32)		°890	5
161)	ZYI23	900	10
104)	PRB7	°900	10/5
162)	ZYR242	900	1/0.5
163)	ZYQ5	900	1/0.25
164)	PRJ3	930	5
165)	ZYM20	930	5
166)	ZYH3	930	1
167)	ZYS25	930	1
168)	ZYU102	930	1/0.25
102)	PRF3	°960	10
58)	PRF4	°940	50
98)	PRF5	°960	10/5
169)	ZYO4	960	10
170)	ZYF5	960	1/0.25
40)	ZYR3	°970	1
171)	ZYH32	970	1
172)	ZYI26	970	1
173)	ZYI2	970	5
174)	ZYH21	970	1
70)	ZYB3	°970	0.25
107)	PRE8	°980	50
98)	PRB9	°1000	50
175)	PRB3	1010	2/0.5
117)	ZYT26	°1010	0.25
63)	ZYN23	°1010	10/5
176)	ZYO3	1010	5
177)		1020	30/20
178)	PRB8	1030	1/0.25
34)	ZYK27	°1030	5
110)	PRD8	°1030	7.5
121)	PRG2	°1040	50
179)	PRD2	1060	10
180)	PRD7	1080	1
181)	ZYN24	1080	1
182)	ZYB4	1080	1/0.5
183)	ZYX7	1080	1/0.25
184)	ZYE4	1080	1/0.5
185)	ZYU67	1080	2/0.5
186)	ZYV47	1080	1/0.25
45)	ZYV52	°1080	0.25
187)	ZYK22	1080	1/0.25
188)	ZYR64	1080	1/0.25
19)	PRI2	°1090	1
68)	ZYT9	°1090	1
189)	ZYT38	1090	1/0.25
190)	ZYN25	1090	1
24)	ZYI25	°1090	1
92)	—	1090	1
191)	ZYU50	1100	1
105)	PRG9	°1100	50
46)	PRI4	°1110	10
192)	ZYT25	1110	1/0.25
193)	ZYS67	1110	1/0.25
75)	PRF7	°1110	5
194)	ZYV66	1110	1
63)	ZYN20	°1120	10

Brazil

	Call	kc	kW
31)	ZYE20	°1130	10
119)	PRH8	°1130	25
37)	ZYI24	°1130	1
195)	ZYU77	1130	1/0.25
196)	ZYT34	1130	1/0.25
197)		1140	10
198)	ZYH7	1160	1/0.5
199)	ZYS73	1160	1
85)	PRI9	°1160	10
78)	PRH3	°1160	1
200)	PRF5	1160	1
201)	ZYA5	1160	1
59)	ZYG25	°1160	1
43)		°1170	1
202)	ZYI20	1170	1
203)	PRC9	1170	5
204)	ZYU72	1170	1/0.25
205)	ZYU38	1170	1/0.25
206)		1170	1/0.25
96)	PRE3	°1180	50
95)	PRB6	°1200	10
103)	PRE9	°1200	10
207)	ZYU91	1200	1/0.25
100)	PRL8	°1210	10/5
22)	PRG8	°1210	1/0.5
208)	ZYL9	1210	1/0.5
53)	ZYB2	°1210	5/1
113)	ZYZ9	°1210	1
209)	ZYX	1210	1
210)	ZYK23	1210	1/0.5
211)		1210	1/0.25
114)	PRA9	°1220	50
212)	ZYB21	1240	5
7)	ZYV64	°1240	1.25
62)	PRF6	°1240	1
213)	ZYC4	1240	1/0.5
214)	ZYP4	1240	1/0.5
215)	PRB5	1240	1
216)	ZYU76	1240	1/0.25
217)	ZYR84	1240	1/0.25
218)	ZYK36	1240	5/10
219)	PRJ2	1250	1
17)	ZYR43	°1250	0.25
220)	PRA5	1260	10/5
221)		1260	1/0.25
222)	ZYG	1260	10
223)	ZYL21	1260	5
224)	ZYV65	1260	1/0.25
79)	ZYX9	°1270	10
225)	ZYS23	1270	1/0.25
226)	ZYV62	1270	1
227)	ZYU44	1270	1
71)	ZYB5	°1270	1
104)	PRG3	°1280	50
121)	PRE4	°1300	10/5
50)	ZYR7	°1300	10
228)	ZYX22	1300	1
229)	ZYR201	1320	1
122)	ZYG3	°1320	10
230)	PRH4	1320	1/0.5
230a)	ZYL25	1320	1
231)	ZYT31	1320	1/0.25
47)	ZYZ24	1320	10/5
232)		1320	1
233)		1320	10
216)	PRI8	°1330	1
34)	ZYV59	1330	1/0.35
235)	ZYV33	1330	1/0.5
236)	ZYI5	1330	1/0.5
237)	PRC4	1330	1/0.5
238)		1330	1/0.5
239)	ZYE25	1330	10
108)	PRH6	°1340	25
240)	ZYX2	1340	1/0.25
241)	ZYF25	1340	1
103)		°1340	1
242)	ZYX5	1340	1/0.25
61)	PRH5	°1350	5
243)	ZYU85	1350	1
244)	ZYN35	1350	5
29)	ZYO7	°1350	2
245)		1350	1/0.25
80)	PRC8	°1360	10
246)	ZYH25	1360	10
247)	ZYU82	1360	1
65)	PRD4	°1370	1
72)	ZYO22	°1370	1
248)	ZYK31	1370	5
55)	ZYQ3	°1370	1
73)	ZYF3	°1370	5
84)	ZYW21	°1370	1
249)	ZYR212	1370	1
250)	ZYS46	1390	1
251)	ZYJ2	1390	1/0.5
252)	ZYK25	1390	1
253)	ZYV49	1390	2
254)	ZYU75	1390	1
24)	ZYH30	°1400	5
255)		1400	5
256)	ZYU55	1400	1
112)	PRD5	°1400	10
257)	ZYR224	1400	1/0.25
44)	ZYF21	°1410	1
258)	PRE7	1410	25/10
259)	ZYH26	1410	10
260)	ZYI4	1420	1/0.25
261)	ZYU94	1420	1
91)	ZYJ7	°1420	5/2.5
262)	PRE2	1430	10
263)		1430	1
264)	ZYH5	1430	1/0.25
97)	PRB2	°1440	20/5
27)	ZYV29	1440	5
265)		1440	10
57)	PRC5	°1450	10
266)	PRB4	1450	5/2
267)	ZYJ20	1450	1
268)	ZYP36	1450	5/2.5
269)	ZYT21	1450	1/0.25
60)	ZYD9	°1460	0.25
270)	ZYH22	1460	1
66)	ZYE2	°1460	0.25
271)	PRF2	1460	20
272)	ZYE3	1470	1/0.5
273)	ZYD2	1470	1/0.5
1)	PRC6	°1470	1/0.5
274)	ZYZ6	1470	1
275)		1470	1
51)	PRJ4	°1470	0.5
276)	ZYN3	1470	1
11)	ZYJ3	°1480	0.5
118)	ZYB20	°1480	1
277)	ZYH20	1480	1
49)	PRD3	°1480	5
74)	ZYE22	°1480	0.25
77)	PRJ9	°1490	1
278)	ZYP29	1490	1/0.5
279)	ZYU46	1510	1/0.25
280)	ZYY5	1510	
281)	ZYG20	1510	0.25/1
18)	ZYM9	°1540	0.25
282)	ZYS9	1540	2.5
283)	ZYI	1540	2.5
5)	ZYP39	°1550	0.25
6)	PRJ5	°1550	0.25
284)	ZYK30	1560	1
285)	ZYN33	1560	1
3)		°1570	0.25
23)	ZYR44	°1600	0.25

States Abbreviations: AC=Acre, AL=Alagoas, AM=Amazonas, AP=Amapá, BA=Bahia, CE=Ceará, DF=Brasilia, ES=Espirito Santo, GB=Guanabara, GO=Goiás, MA=Maranhão, MG=Minas Gerais, MT=Mato Grosso, PA=Pará, PB=Paraiba, PE=Pernambuco, PI=Piaui, PR=Paraná, RJ=Rio de Janeiro, RD=Rondonia, RN=Rio Grande do Norte, RS=Rio Grande do Sul, SC=Santa Catarina, SE=Sergipe, SP=São Paulo.

Short Waves:

1) C.P. 173, Uberlandia, MG. **Te:** 4466. **Cable:** Radico. **L.P:** Dir. Gen: G. Motta Baptista. Dir. Tec: V. P. Dossena. **D.Prgr: N:** 13.30, 20.00. **Ann:** "R. Difusora Brasileira, PRC6 e ZYV30, Uberlandia, MG". **V.** by letter.

2) Itacoatiara, AM – 3) Parintins, AM.

4) Ed. S. José, Carauru, PE. **L.P:** Dir: J. Almeida.

5) Rua Francisco da Rosa 84. São João de Miriti, RJ.

6) C.P. 105, Limeira, SP. **L.P:** Dir: V. Bortolan.

7) C.P. 377, Governador Valares. **Te:** 5322. **Cable:** Repumm. **L.P:** Dir. Gen: L. Vilela. St. Mgr: F. L. Teixeira. Dir. Tec: L. Rocha. **Ann:** "R. Por um Mundo Melhor, ZYV64 Onda Media, ZYV71 Onda Tropical, Governador Valadares, Minas Gerais, uma emissora Católica". **V.** by letter. Rp. Recordings accepted.

8) Rua R. Rocha Medeiros 1113, Monte Alto, Jabotical, SP.

9) Mossoró, Pra. Rafael Fernandes, RN – 10) C.P. 77, Amparo, SP.

11) C.P. 909, Anápolis, GO. **Te:** 2263. **Cable:** Caraja. **L.P:** St. Mgr: N. E. de Oliveira. Dir. Tec: J. S. Vilarinho. **Ann:** "ZYJ3 e ZYW32, emissoras de ondas média, curta e FM de sua R. Carajá de Anápolis". **V.** by letter. Recorded re. in P, Sp or E accepted.

12) C.P. 6, Leopoldina, MG. **Cable:** Sirena. **L.P:** Dir. Gen: C. Geraldo. **D.Prgr:** N: 11.00, 14.00, 21.00, 01.00. **Ann:** "R. Sirena, do Sistema Radioeducativo Nacional do Ministerio da Educação e Cultura". **V.** by letter. Re. in P, Sp or E. **Pub:** Prgr.schedule free.

13) C.P. 95, São Carlos, SP. **L.P:** Pres: L. Zambel. **V.** by letter.

14) Av. Pedro II 220, São Cuiz. MA. **L.P:** Dir: R. Bacelar.

15) Av. 1° de Maio 27, Rio Bonito, RJ. **L.P:** Dir: E. R. Vieira.

16) C.P. 246, Aracatuba, SP. **Te:** 2270. **Cable:** Radiocultura. **L.P:** Dir. Gen: A. Barbosa. St. Mgr: J. B. Brussolo. Dir. Tec: F. C. Arroyo. **D.Prgr:** N: 15.15, 23.45. **Ann:** "R. Cultura de Aracatuba, Ondas medias e Tropicais". **V.** by letter. Recorded re. in P or E accepted.

17) Rua 7 de Setembro 301, Socoraba, SP. **Te:** 23712. **L.P:** Dir: J. R. Bismara. Dir. Tec: Dr. O. A. Bismara. **D.Prgr:** 09.00–04.00 (mw). **N:** 14.00, 16.00, 19.00, 23.00. **V.** by letter. Recordings accepted.

18) Rua Dr. Candido Rodriguez 87, Bragança Paulista, SP. **L.P:** Dir. Gen: J. Batista M. St. Mgr: J. Bonucci F. Dir. Tec: I. Serbim. **V.** by letter. Rp. Recordings accepted.

19) Rua Paes Leme 20, Marilia, SP. **L.P:** Dir. Gen: O. Lignellis.

20) C.P. 814, Ribeirão Preto, SP.

21) Av. Cruz Cabugá 394, Recife, PE. **Te:** 4-1522. **Cable:** Diarbuco. **L.P:** Dir. Gen: H. C. Motta. St. Mgr: F. Trigueiro. Dir. Tec: Dr. I. Olimpiew. **V.** by letter. Rp.

22) Rua Padre Anchieta 741, Bauru. **L.P:** Pres: M. Leuzzi Jr. **V.** by QSL-card. Re. in P, Sp, E, F.

23) Praca NS Aparecida 315, Aparecida. **Te:** 2197. **L.P:** Dir. Gen: V. Coelho de Almeida. St. Mgr: S. de Neme Jorge. Dir. Tec: B. I. Baronto. **D.Prgr: N:** 12.00, 14.30, 17.30, 20.30, 00.00. **Ann:** "A R. Aparecida, a mais poderosa emissore católica das Americas em Ondas Curtas, Medias & Tropicais, de Aparecida, São Paulo, Brasil". **V.** by QSL-card. Rp. Recordings accepted. **Pub:** Prgr.schedule free.

24) Praca Pio X 335, Natal, RN. **L.P:** Dir. Gen: C. R. Miranda. Dir. Tec: J. Reis. **V.** by letter. **Re.** in Sp, P.

25) C.P. 401, Uberlandia, MG. **Te:** 2340. **L.P:** Dir: N. A. dos Santos. **V.** by letter.

26) C.P. 57, Crato, CE. **L.P:** Pres: V. de Araujo Matos.

27) Rua Coromandel 117, Belo Horizonte, MG. **Te:** 48595. **L.P:** Dir. Gen: J. Carneiro. Dir. Tec: D. Abreu M. **Ann:** "R. Itatiai, a emissora Brasileira que mais cresce". **V.** by letter. Recordings accepted.

28) Rua Pedro II 148, Guarulhos. **L.P:** Dir: P. C. Nogueira.

29) C.P. 160, Campina Grande, PB. **Te:** 1960. **L.P:** Dir. Gen: H. C. Motta. **D.Prgr: N:** 10.00, 15.30, 20.05, 01.00. **"A Voz do Brasil":** 22.00. **Ann:** "R. Borboremа, Emissoras Associadas de Campina Grande". **V.** by letter. Rp.

30) C.P. 5, Pres. Prudente, SP. **L.P:** Dir. Gen: A. Campos. **Ann:** "R. Presidente Prudente, uma das Emissoras Coligadas, falando para todo o Brasil" or "PRI5 e ZYR59, R. Difusora de Presidente Prudente, uma das Emissoras Coligadas, transmitindo simultaneamente em ondas médias e curtas 1240kc, 3335kc".

31) Travessa Campos Sales 100, Belém, PA. **Te:** 3422. **Cable:** Provan. **L.P:** Dir. Gen: M. Trindade. **D.Prgr: N:** 10.05, 12.00, 14.05, 16.00, 18.00, 20.00, 21.55, 23.30, 01.00. **V.** by letter. Rp.

32) C.P. 414, Londrina, PR. **Te:** 1842. **L.P:** Dir: E. Afonso. St. Mgr: N. Lainetti. Dir. Tec: H. Baer. **D.Prgr: N:** 10.25, 13.55, 16.55, 21.55, 02.00, 02.50. **Ann:** "R. Alvorada de Londrina, a Emissora da Familia Paranaense". **V.** by letter. Rp. Recordings accepted.

33) C.P. 1870, Londrina, PR. **L.P:** Dir. Gen: Dr. R. Zanoni.

34) C.P. 1313, Recife, PE. **L.P:** Dir. Gen: A. T. Costa. St. Mgr: G. Correia. Dir. Tec: F. Saboia. **D.Prgr: N:** Every h on the h. **Ann:** "Esta é a sua R. Olinda, ZYK27, ZYK28, a emissora da familia pernambucana, transmitiendo simultaneamente em ondas médias, curtas e FM" or "R. Olinda, ZYK27, ZYK28, a mais popular emissora pernambucana". **V.** by letter. Rp.

35) C.P. 125, Teresina, PI. **L.P:** Dir. Gen: W. S. Guimaraes.

36) Av. Pres. Vargas 417, Rio de Janeiro, GB. **L.P:** Dir: A. Gueiroz.

37) Praça Rafael Fernandes 8, Mossoró. **L.P:** Dir. Gen: J. N. da Escossia. Mgr: J. M. de Souza Luz. Dir. Tec: C. Alberto. **Ann:** "R. Tapuyo de Mossoró, ondas médias e curtas falando para todo o

Brasil. A mais popular emissora mossoroense". V. by letter. Recordings accepted.
38) C.P. 152, São Luiz, MA. **L.P:** Dir: R. Bacelar. **V.** by letter.
39) C.P. 625, Campinas, SP. **L.P:** Dir. Gen: S. Pedroso. **Ann:** "ZYV3, R. Brasil de Campinas ZYR39, R. de Valinhos emissoras brasileiras da Organização Irmaos Pedroso". **V.** by letter.
40) C.P. 32, Feira de Santana. **Te:** 168. **L.P:** Dir. Gen: F. A. de Grottamare. Dir. Tec: D. Nogueira. **D.Prgr:** N: 10.30, 11.00, 13.00, 15.00, 16.05, 18.00, 20.00, 22.00, 00.00. **Ann:** "R. Sociedade de Feira de Santana por suas Emissoras de Ondas Media e Curta, Voz de Comando a Serviço da religião e da pátria". **Int-Sig:** Vibraphone. **V.** by letter. Recordings accepted. Rp.
41) Rua P. Pereira 383, Fortaleza, CE. **L.P:** Dir. Gen: M. S. Pimentel. **D.Prgr:** N: W 14.50, D 01.35. **Ann:** "R. Dragão do Mar, a emissora do Ceará que o mundo escuta". **V.** by letter.
42) Av. Liberdade 1034, São Paulo. **Te:** 32-8708. **L.P:** Dir: C. Mero.
43) Av. Carlos Gomes s/n, Porto Velho, RD. **L.P:** Dir: V. Hugo. Dir. Tec: F. O. R. Barbosa. **D.Prgr:** N: 11.00, 02.30 and short N every h on the h 12.00–24.00 exc. 17.00, 22.00. **V.** by letter. Recordings accepted.
44) Rua do Apium 118–130, Sao Luiz, MA – 45) Av. Vergilio Franco 375, Cambuquira, MG.
46) Palacio do Governo Rodrigues de Aquino s/n°, João Pessoa, PB. **D.Prgr:** N: 21.45, 24.00, 01.35. **Ann:** "PR14, R. Tabajara da Paraiba transmitindo em ondas curtas e médias". **V.** by letter. Re. in E, Sp, F.
47) Av. Rio Branco 277, 6°, Rio de Janeiro, GB. **L.P:** Dir. Gen: I. D. Mello, A. de Lima Santana. **Ann:** "R. Copacabana, a emissora do Otimismo".
48) Eduardo Ribeiro 566, Manaus, AM.
49) Praça D. Pedro II°, 17, Petropolis, RJ. **Cable:** Difusora. **L.P:** Dir. Gen: W. Carneiro Malta. **D.Prgr:** N: 16.00, 23.25, 01.05, 02.45. **Ann:** "Emissoras de ondas médias e curtas da Petropolis R. Difusora, o microfone lider do Estado do Rio". **V.** by letter.
50) C.P. 578, Fotaleza, CE. **L.P:** Dir. Gen: F. B. Barreto – 51) C.P. 31, Parnaiba, PI. **V.** by letter – 52) C.P. 38, Uberaba, MG. **L.P:** Dir: Q. Jardim.
53) C.P. 102, Varginha, MG. **Te:** 2862. **L.P:** Dir. Gen: A. L. Bittencourt. St. Mgr: S. Sampaio M. Dir. Tec: O. C. Corsino. **D.Prgr:** N: 14.15, 21.15. **Ann:** "ZYB2 e ZYV56, Emissoras da Sociedade R. Clube Varginha Ltda". **V.** by letter. Recordings accepted.
54) C.P. 171, Boa Vista, RS. **Cable:** "Radioraima". **L.P:** Dir. L. Oliveira.
55) Rua Areolino de Abreu 1101, Terezina, PI. **Te:** 316. **Cable:** Radiofusora. **L.P:** Dir. Gen: Dr. J. P. de Saboia. Dir. Prgr: J. L. dos Santos. **D.Prgr:** N: 09.00, 09.45, 15.00, 15.45, 21.10, 21.30, 00.00, 01.00. **V.** by letter. Rp.
56) Rua V. do Rio Branco 247, Taubaté, SP. **Te:** 302. **L.P:** Dir. Gen: E. A. Beringhs. Dir. Tec: A. R. Goncalves. **D.Prgr's:** 24 h(mw). N: 14.00. **Ann:** "ZYA8 e ZYR61 da R. Difusora Taubaté, S. Paulo, Brasil". **V.** by QSL-card. Recordings accepted.
57) Av. Pres. Vargas 351, Belém, PA. **Te:** 3263. **L.P:** Dir. Gen: E. Proença. Dir. Tec: M. Franco. **D.Prgr:** 24 hrs(mw). N: 10.15, 15.15, 23.40. **Ann:** "PRC5 R. Clube do Pará, a Voz que fala e canta para a planicie". **V.** by letter. Recordings accepted.
58) Av. Rio Branco 110, Rio de Janeiro. **Te:** 22-1818. **L.P:** Pres: C. Pereira C. Dir. Gen: M. F. do Nascimento Brito. Dir. Tec: W. Cabral X. **D.Prgr:** N: 11.30, 12.30, 13.30, 14.30, 15.30, 17.30, 18.30, 19.30, 20.30, 21.30, 23.30, 00.30, 02.30, 03.30. **Ann:** "PRF4 e ZYZ30 R. Jornal do Brasil, Rio de Janeiro. **V.** by letter. Recordings accepted.
59) Rua Teodoro Pacheco 1179, Teresina, PI. **L.P:** Dir: F. Das Chagas Mendes. **D.Prgr:** N: 09.25, 00.05, 01.30.
60) Departamento do Imprensa e Radiodifusão do Acre, Rio Branco.
61) C.P. 143, Poços de Caldas, MG. **L.P:** Dir: J. B. Rocha **V.** by letter or QSL-card
62) Av Eduardo Ribeiro 566, Manáus AM. **Te:** 1135. **Cable:** Radio Bareh. **L.P:** Dir. Gen: E. C. Barahuna. **D.Prgr:** mw: 09.00–03.00. N (W only): 10.00, 11.30, 13.30, 16.30, 19.30, 22.30, 23.30, 01.00. **V.** by letter. Rp.
63) Av. 7 de Setembro 311, Salvador, BA. **Te:** 50125. **Cable:** Radiocultura. **L.P:** Gen. Mgr: J. R. Rocha. St. Dir: M. M. da Silva. **D.Prgr:** N (on 1120/9595/15225kc): 15.20, 21.20, 23.00, 01.00.**V.** by QSL-card. Rp. Recorded re. in P, Sp, E, F, I, accepted.
64) Av. Pres. Vargas 417A, Rio de Janeiro, GB. **L.P:** Pres: J. J. de Carvalho. **V.** by letter or QSL-card.
65) C.P. 22, Araraquara, SP. **Te:** 2828. **L.P:** Dir. Gen: R. Lupo. Dir. Tec: J. A. Quirino dos Santos. **D.Prgr:** N: 11.30, 14.30. **Ann:** "Estas são Emissoras da R. Cultura Araraquara, Ondas Medias, Curtas e FM". **V.** by letter and QSL-card. Recordings accepted.
66) Av. Candido Mendes, Macapa, AP. **L.P:** Dir: A. Nogueira de Souza. **D.Prgr:** N: every h on the h and W 21.30. **V.** by letter. **F.Pl:** 10kW sw-tr.
67) Praça J. Calheiros 8, Penedo. AL. **L.P:** Dir: C. H. V. Guimaraes. **V.** by letter. Re. in E, P.
68) C.P. 262, Juiz de Fora, MG. **L.P:** Dir. Gen: Dr. S. V. Mendes. **D.Prgr:** N: 12.00, 15.10, 20.00, 22.30, 00.30. **Ann:** "Emissoras Brasileiras de ondas curtas e médias da R. Industrial de Juiz de Fora, Estado de Minas Gerais". **V.** by letter.
69) Praça Monsenhor Linhares, Sobral, CE – 70) Rua Luiz Gama 492, Lins, SP. **L.P:** Dir: H. Noronha Franco.
71) C.P. 145, Natal, RGN. **Te:** 2582. **Cable:** Radio Poti. **L.P:** Dir. Gen: L. M. Alves. Dir. Tec: S. F. Neto. **D.Prgr:** mw 09.00–03.00. N: W 09.35, 12.30, 15.00, 16.00, 23.00, 23.30. **Ann:** "R. Poti, Natal, Brasil" (also ann. in English & French every h and half h). **V.** by letter. Recordings accepted.
72) Escadaria São Brento 25, Vitoria, ES. **Ann:** "Estações de ondas médias e curtas R. Capixaba, Vitória, Brasil" – 73) Av. J. de Castilhos 1576, Caxias, MA.
74) Rua Dr. Candido Rodrigues 87, Bragança. PA. **Te:** 112. **L.P:** Dir: J. Batista Zechin. **D.Prgr:** N: 09.55, 10.55, 11.55, 19.55, 24.00. **Ann:** R. Educadora de Bragança ZYE22, ZYE23 ondas médias e tropical..., a Emissora Católica da familia brasileira". **V.** by letter. Re. in P.
75) C.P. 79, Campos, R.J. **Te:** 1582. **L.P:** Dir. Gen: M. F. Sampaio. Dir. Tec: N. Silva. **D.Prgr:** N: 09.45, 14.30, 16.00, 18.00, 21.55. **Ann:** "PRF7, R. Cultura de Campos pioneira e lider do estado do Rio". **V.** by letter. Recordings accepted.
76) Av. C. Gomez, Porto Velho. RD. **Te:** 272. **L.P:** Dir: J. Batista.
77) Edif. Matos Carvalho 3° andar, São Luiz, MA. **Te:** 1160. **L.P:** Dir: J. Ferreira. **D.Prgr:** Sun 23.30–24.00 English; Mon 01.00 prgr. for foreign listeners in E, P, Sp.
78) C.P. 126, Cuiaba, MT. **L.P:** Dir: J. Oliveira.
79) C.P. 330, Goiania. GO. **Te:** 6-2555. **Cable:** "Errebece". **L.P:** Dir. Gen: J. Abrão. St. Mgr: S. Fracari. Dir. Tec: J. Fleury. **D.Prgr:** N: W 12.00, 15.00, 21.54, 23.24, 01.04, 03.00. Sun 11.25, 12.25, 13.25, 14.25, 15.54, 21.25, 22.25, 23.24. **Ann:** "Sintonizam R. Brasil Central, Goiânia, ondas média, curta, tropical e frequencia modulada, operando em Goiânia, Capital do Estado de Goias". **V.** by QSL-card. Recordings accepted.
80) Av. Treze de Maio 23, Rio de Janeiro, GB. **Te:** 32-8199. **Cable:** Radioguan. **L.P:** Dir. Gen: A. de Carolia. St. Mgr: D. Tanus. Dir. Tec: Dr. U. B. Pinheiro. **D.Prgr:** 24 h. N: 11.30, 00.30, 03.00. **Ann:** "PRC9, R. Guanabara, Rio de Janeiro Brasil". **V.** by QSL-card, Rp.
81) Rua Estvão a correa 478, Aquidauana, MT – 82) Manaus, AM
83) Petralina, PE.
84) Av. Anhanguera 92, Goiania, GO. **L.P:** Dir: J. B. Texeira.
85) C.P. 80, Vitoria, ES. **L.P:** Dir: H. Blachman.
86) C.P. 225, Petropolis, RJ. **L.P:** Dir: N. Paiva – 87) Guiaba, MT. **L.P:** Dir: V. D. Cezar.
88) Praça Costa Pereira 132, Vitoria, ES. **Te:** 3406. **Cable:** Ravito. **LP.:** Dir. Gen: N. Bastos. Dir. Tec: H. Pagliari. **D.Prgr:** mw: 09.00–03.00; N: 11.00, 12.00, 15.00, 16.00, 17.00, 18.00, 19.00, 20.00, 21.55, 00.30. **Ann:** "Ouvem a R. Vitoria, da capital do Espirito Santo, Brasil". **V.** by letter. Rp.
89) Av. Paulista 900, 4° andar, São Paulo. **Te:** 355151. **Cable:** Radigazeta. **L.P:** Dir. Gen: I. F. de Campos. St. Mgr: J. F. Jorge. Dir. Tec: V. de Marco. Dir. Tec (TV): C. Paiva. **D.Prgr:** N: 15.00, 19.00, 01.30, also every h on the h. **Ann:** "PRA6 R. Gazeta, São Paulo, a emissora da Elite, simultaneamente com ondas médias e curtas". **Int-Sig:** First movement of "Concert in B" by Tjaikowsky. **V.** by QSL-card. Rp.
90) Rua Caldas Jr. 219, Porto Alegre, RGS. **L.P:** Dir. Gen: E. Degrazia. Dir. Tec: B. F. Steiger. **D.Prgr:** N: 10.00, 16.00, 22.50, 02.00. **Ann:** "Emissoras Brasileiras de ondas médias e curtas de R. Guaiba de Porto Alegre, Rio Grande do Sul, Brasil". **V.** by letter or QSL-card. Recordings accepted.
91) C.P. 45, Floranopolis, SC. **L.P:** Dir: C. Bonetti. **V.** by QSL-card.
92) Ministerio da Educação e Cultura, Praca da Republica 141-A, Rio de Janeiro, GB (Owned & operated by The Federal Gov, Ministry of Education). **L.P:** Dir. Gen: E. L. Viama. Dir. Tec: H. C. de Souza. **D.Prgr:** N: W 12.00, 15.00, 20.00, 22.00, 24.00, 02.50. **LL: English** W 10.30, **French** W 10.00. **Ann:** "R. Ministerio da Educação e Cultura, transmitiendo pela Cultura, dos que vivem em nossa tena, pelo progresso do Brasil". **V.** by letter.
93) C.P. 1027, Belo Horizonte, MG. **Te:** 21589. **L.P:** St. Mgr: A. Gatti. Dir. Tec: A. P. da Piedade. **D.Prgr:** N: 10.05, 11.00, 15.15, 16.00, 21.55, 01.00, 02.00. **Ann:** "Aqui falam PR13, PRK5, Emissoras de ondas curtas e medias da R. Inconfidencia, Belo Horizonte, Minas Gerais, Brasil". **Int-Sig:** Gong. **V.** by QSL-card or letter. Re. in E.
94) Av. Cruz Cabuga 394, Recife, PE. **Te:** 4-1522. **Cable:** Diarbuco. **L.P:** Dir. Gen: D. Borges. Dir. Tec: A. Moreira. **D.Prgr:** N: 00.00, 01.00. **Ann:** "Esta é a R. Clube de Pernambuco, PRA8, do Recife, transmitindo em onda média, na freq. de 720kc e em ondas curtas, em 6015 e 11865kc, em 49 e 25 metros, respectivamente". **V.** by letter. Rp. Recordings accepted. Rp.
95) C.P. 8087, São Paulo, SP. **Te:** 334175. **V.** by QSL-card.
96) Rua Irineu Marinho 35, Rio de Janeiro. **Te:** 426405. **L.P:** Dir. Gen: R. Marinho. Dir. Tec: L. A. de Medeiros. **D.Prgr:** N: Every h on the h. **Ann:** "R. Globo do Rio de Janeiro, uma emissora de "O Globo", o maior jornal do Pais". **V.** by QSL-card. Re. in P, Sp, E, F.
97) C.P.54, Curitiba, PR. **Te:** 4-4377. **Cable:** Bedois. **L.P:** Dir: L. G. de Freitas. Dir. Tec: H. E. Boehm. **D.Prgr:** N: 10.00, 22.00. **Ann:**

"Ouvem R. Clube Paranaense em Ondas Médias, Curtas e FM". V. by QSL-card. Recordings accepted.
98) Av. Miruna 713, São Paulo, SP. Te: 613667. Ann: "PRH7 R. Panamericana, São Paulo, Brasil, a mais geuida". V. by letter.
99) Ministerio da Agricultura, Largo da Misericordia 4° andar, Rio de Janeiro. L.P: Dir: A. Clovis J. V. by QSL-card.
100) C.P. 1472, Brasilia, DF. L.P: Dir: H. Cyrinho. D.Prgr: N: (R. Nacional Brasilia): 11.00, 12.00, 13.00, 15.00, 16.00, 17.00, 18.00, 19.00, 20.00, 21.50, 23.00, 01.00. V. All reports to be sent to Mr. L. Toledo, Foreign Relations Department. Rp.
101) Av. Imperador Pedro I, 346, Recife. PE. L.P: Dir. Gen: Dr. F. pessoa de Queiros. Ann: P: "R. Jornal do Comércio, Recife, Pernambuco, ondas médias e curtas" or "Emissoras da R. Jornal do Comércio, Pernambuco, a voz mais potente de Brasil". V. by QSL-card.
102) C.P. 252, 4142. São Paulo. V. by QSL-card or letter.
103) C.P. 222, Fortaleza, CE. Te: 1-3125. Cable: Prenove. L.P: Dir. Gen: M. E. P. Campos. D.Prgr: mw: 08.00–03.00. N: 08.45, 09.00, 11.00, 13.00, 15.30, 18.00, 18.55, 20.00, 21.50, 23.30, 00.30. V. by letter. Rp.
104) Av. Venezuela 43, Rio de Janeiro, GB. Te: 43-1309. L.P: Dir. Gen: N. Bastos. Dir. Prgr: R. Rezende. D.Prgr: N: W 10.00, 10.55, 15.00, 21.50, 23.55, 00.05, 00.35, 04.50. Sun 10.00, 15.00, 21.55, 00.30, 01.30, 03.25. Ann: "R. Tupi do Rio de Janeiro, o Cacique do Ar". V. by letter. Rp.
105) Rua Sebastião Pereira 218, São Paulo. L.P: Dir: V. C. Petrelia Geraldino Jr. Ann: "PRG9, R. Nacional, São Paulo, Brasil". V. by QSL-card and letter.
106) C.P. 1164, Porto Alegre, RS. Cable: Pioneira. Te: 31822. L.P: Dir: M. Sirotzky S. Dir. Tec: H. Simon. D.Prgr: N: 10.00, 15.00, 01.30. Ann: "Esta é a PRC2, PRC21 & PRC23 R. Gaucha de Porto Alegre, Rio Grande do Sul, Brasil". V. by letter. Rp. Recordings accepted.
107) Praça Maua 7, 19–22° andar, Rio de Janeiro. Te: 438850. L.P: Pres: S. C. Lopes. Dir: M. Aréas. Dir. Tec: J. Nobrega. D.Prgr: mw: 24 h. N: W 09.05, 11.00, 13.00, 15.55, 16.50(Sat only), 17.00*, 18.00*, 19.00*, 20.30*, 22.00, 23.25, 01.05, 04.00. Sun 09.05, 15.55, 21.00, 23.35. *=not Sat. Ann: "Ouvem R. Nacional, Rio de Janeiro, Brasil, por suas emissoras de ondas curtas, médias e frequéncia modulada". Int-Sig: First movement of the Brazilian musical poem "Luar do Sertão". V. by QSL-card.
108) C.P. 140, Belo Horizonte, MG. Te: 2-2445. Cable: Radio Guarani. L.P: Dir. Gen: J. de Oliveira V. Dir. Tec: V. P. Neto. D.Prgr: N: 03.00, 03.30, 04.00, 05.00, 06.00, 07.00, 08.00, 09.30, 10.05, 11.00, 11.30, 12.30, 15.00, 19.15, 20.55, 00.30, 01.00. V. by QSL-card. Rp. Recordings accepted
109) C.P. 372, São Paulo, SP. Te: 80-1613. Cable: Radiantes. L.P: Pres: J. Jorge Saad. Dir. Tec: L. Aurani. D.Prgr: N: 10.00, 21.50, 23.00, 02.50. Ann: "PRH9, R. Bandeirantes, a mais popular emissora Paulista". Int-Sig: Vibraphone and organ. V. by QSL-card or letter. Recordings accepted.
110) Rua Riachuelo 48, Rio de Janeiro, GB. Te: 52-8021. L.P: Dir: R. Berardo.
111) Departamento de Segurança Nacional, Rua da Relação, Rio
112) Av. Erasmo Braga 118, Rio de Janeiro, GB. Te: 31-1264. L.P: Dir. Gen: W. Cunto. V. by letter. Prgr.schedule free. Recordings accepted.
113) C.P. 471, Curitiba. PR. Te: 41393. L.P: Dir: N. Chede. D.Prgr: mw: 09.00–03.00. ZYS47 R. Curitibana: 09.00–02.00. Ann: "Emissoras de ondas curta, médias e frequencia modulada da R. Emissora Paranaense, Curitiba, Paraná, Brasil". V. by letter and QSL-card.
114) Rua Mayrink Veiga 15, Rio de Janeiro. St. closed by the Fed. Gov.
115) Rua Wenceslau Braz. 78, São Paulo. Te: 333246. L.P: Dir: D. A. Macedo. Dir. Tec: A. A. Bouczan. D.Prgr: N: Every half h. Ann: "R. Nove de Julho de São Paulo, Brasil". V. by letter. Rp.
116) Rio de Janeiro, GB.
117) C.P. 331, Florianopolis, SC. L.P: Dir. Gen: Dr. P. K. Bornhausen. Ann: "Emissoras brasileiras de onda média e curta da R. Diario da Manhã de Florianópolis, Santa Catarina" or "Estaçoes de Florianópolis da R. Diario de Manhã". V. by QSL-card.
118) C.P. 443, Manaus, AM. Te: 2770. L.P: Dir. Gen: J. de Sousa Lima. Dir. Tec: F. Bazerra. D.Prgr: 09.00–05.00 (mw). N: 00.30. Ann: "Esta é a R. Rio Mar de Manaus, Amazonas, Brasil, operando com suas estaçoes de ondas médias e curtas, ZYB20 e ZYB22, nas frequencias, respectivamente, de 1480kc e 9695kc". V. by QSL-card. Re. in P, E, Sp. Recordings accepted.
119) Ministerio de Trabalho, Av. Pres. Antonio Carlos 251, Rioe d Janeiro. Ann: "Escutam a R. Maua, a emissora do trabalhador".
120) Rua 7 de Setembro 1123, Porto Alegre, RGS. Te: 5177. Cable: Radiofar. L.P: Dir. Gen: N. D. de Oliveira. D.Prgr: mw: 09.00–04.00. N: W 10.00, 11.00, 11.55, 13.00, 14.00, 15.55, 17.00, 18.00, 19.00, 20.00, 21.50, 23.30, 00.30, 01.30, 01.40. Sun 10.00, 15.55, 21.50. Ann: "R. Farroupilha, Porto Alegre, Brasil". V. by letter. Rp. Pub: Prgr. on request.
121) Rua 7 de Abril 230, São Paulo. Te: 34-4181. L.P: Pres: E. Monteiro. Ann: "PRE4, R. Cultura de São Paulo, transmitiendo em ondas médias, curtas e frequencia modulada".
122) C.P. 62, Goiania, GO. Te: 6-6042. Telex: 285. Cable: Folhago. L.P: Dir. Gen: Dr. F. Braga Sobrinho. D.Prgr: N: 11.25, 12.25, 13.25, 14.25, 15.00, 16.25, 17.25, 18.25, 19.25, 20.25, 21.25, 23.25, 01.00. Ann: "Sintonizam R. Clube de Goiania, Rede Nacional de Emissoras Associadas, falando para o Brasil". V. by letter. Rp. – 123) Curitiba.
124) Rua Carlos Gomes 57. Salvador, BA. Te: 3-3521. Cable: Gremio. L.P: Dir: R. Xavier. V. by letter. Rp.
125) C.P. 1053, Curitiba, PR. L.P: Dir: A. R. de Assis – 126) Rua 15 Novembro 707, RS. L.P: Dir: H. R. Larea.
127) C.P. 18, Ribeirão Preto, SP. Te: 2879. L.P: Dir. Gen: J. Laureano. St. Mgr: M. Simoes Filho. Dir. Tec: W. L. Perin. Ann: "PRA7, R. Clube de Ribeirão Preto, onda média de 730kc e ZYR 206, onda curta de 15415kc". V. by letter.
128) R.U.S.D. – I.T.A. São José dos Campos, SP. Te: 450. L.P: Dir. Gen: M. R. Cherubini. Dir. Tec: M. F. Gonzales. Ann: "Ouvem a ZYR232, RUSD, emissora construida dirigida e operada por alunos do ITA, e que transmite na freq. de 17725kc, faixa de onda de 16 metros". V. by letter and QSL-card. Recordings accepted. Rp.

Medium Waves:
129) R. Soc. Passos, Passos, MG – 130) R. Emis. de Recife, Recife, PE – 131) R. Atlantica, C. P. 7, Santos, SP – 132) R. Cataguazes, Coronel Vieira 182, Cataguazes, MG – 133) R. Dif. Brasileira, Prata, MG – 134) R. Londrina, Pr.
135) R. Assuncao Cearense, Visc. Sabóia 280, Fortaleza, CE – 136) R. Dif. Cuiaba, Praça B. Constant, Cuiabá, MT – 137) R. Dif. Triangulina, Praça da Bandeira 16, Uberaba, MG – 138) R. Dif. Cambará, Carambará, PR – 139) R. Dif. Sergipe, J. P. Franco, Aracaju, SE. 140) R. Mirador, Av. A. Ramos 42, Rio Sul, SC – 141) R. Santamariense, G. Martins, Santa Maria, RS – 142) R. Dif. Portoalegrense, Rua Uruguai 155, Porto Alegre, RS – 143) R. Cultura de Sergipe, Simão Dias 643, Aracaju, SE – 144) Empreza Jornal do Comercio Limoeiro, PE.
145) R. Soc. Ponta Grossa, Ponta Grossa, PR – 146) R. Mineira, São Paulo 516, Belo Horizonte, MG – 147) R. Cl. de Lages, C. P. 60, Lages, SC – 148) R. Bela Vista, O. Maciel 540, Uberlandia, MG – 149) R. Dif. de Minas Gerais, João Monlevade, MG.
150) R. Nordeste, Macau, RN – 151) Soc. de R. Tuba, Tubarão, SC – 152) Soc. R. Hora Certa, Praça da Liberdade 61–7°, São Paulo, SP – 153) R. Marumby, Praça Gen. Osório, Curitiba, PR – 154) R. Universal, Santos, SP.
155) R. Dif. Paraisense, São Sebestião do Paraiso, MC – 156) Universidade de Recife, Recife, PE – 157) R. Excelsior da Bahia, G. Brito 14 A, Salvador, BA – 158) R. Rural de Concordia, C. P. 11, Concordia, SC – 159) R. Mundial, Av. Rio Branco 181, Rio, GB.
160) R. Itai, Andradas 1155, Itai, RS – 161) R. Nordeste, J. Pessôa 86, Natal, RN – 162) R. Cult. de Rio Preto, São José do Rio Preto, SP – 163) R. Dif. Bento Goncalves, Bento Gonçalves, RS – 164) Radio Araguari, Brasil Acioli 28, Araguari MG.
165) R. Liberdade de Sergipe, Aracaju, SE – 166) R. Cultura de São Vicente, Conselheiro Nébias 170, São Vicente, SP – 167) R. Paranaense, Timoneira, RP – 168) R. Aratiba, Erechim, s/n°, Aratiba, RS – 169) Governo do Estado de Alagoas, P. Monteiro 108, Maceió, AL. 170) Emis. Reunidas R. Cultura, C.P. 89, Passo Fundo, RS
171) R. Educadora do Nordeste Ltda, Av. Dom José 783, Sobral, CE – 172) R. Brejui Ltda, Pres. J. Pessôa 26, Currais Novos, RN – 173) R. Imembui S. A., Aires 1980, Santa Maria, RS – 174) R. Iracema de Fortaleza, Santa Luzia 391, Juazeiro do Norte, CE.
175) R. Soc. de Juiz de Fora, Barão de S. João Nepomuceno 197, Juiz de Fóra, MG – 176) R. Chavantes, Praça da Liberdade, Ipameri, GO – 177) R. Campos Gerais, Curitiba, PR – 178) R. Rio Preto, Campos 2087, São José de Rio Preto, SP – 179) R. Emis. Metropolitana, Riachuelo 48, Rio de Janeiro, GB.
180) R. Cl. de Sorocaba, São Bento 253, Sorocaba, SP – 181) R. Cultura de Feira de Santana, F. Santana, BA – 182) R. Cl. de Patos, Patos, MG – 183) R. Teofilo Otoni, Teofilo Otoni, MG – 184) R. Soc. de Friburgo, Praça G. Vargas 74, Nova Friburgo, RJ.
185) Universidade do Rio Grande do Sul, Sarmento Leite 426, Porto Alegre, RS – 186)R. Minas, Rio de Janeiro 430, Belo Horizonte, MG – 187) R. Dif. de Caruaru, C. P. 111, Caruaru, PE – 188) R. Piratininga de Votuporanga, Votuporanga, SP – 189) R. Colon, C. P. 25, Joinville, SC.
190) R. Cl. de Conquista, Praça Barão do Rio Branco 18, Vitoria da Conquista, BA – 191) R. Emis. do Nordeste, Flores da Cunha, RS – 192) R. Anita Garibaldi, Florianópolis, SC – 193) R. Tapojóz Ltda, Barão do Cêrro Azul 874, Sao José dos Pinhais, PR – 194) R. Planalto de Araguari, Afonso Pena 516. Araguari, MG.
195) R. Cultura de Gravatai, Cel. Vic 456, Gravatai, RS – 196) R. Dif. Vale do Itajai, C. P. 61, Blumenau, SC – 197) R. Acaica, Coromandel 117, Belo Horizonte, MG – 198) R. Presidente Wenceslau, P. Wenceslau, SP – 199) R. Cl. de Londrina, Londrina PR.
200) R. Cariri, C. P. 83, Campina Grande, PB – 201) R. Dif. de Join-

ville, Joinville, SC – 202) **R. Dif. de Mossoro**, A. Fernandes 259, Mossoró, RN – 203) **R. Educadora de Campinas**, Glicério 957, Campinas, SP – 204) **R. Princesa do Jacui**, C. P. 69. Candelaria, RS. 205) **R. Municipal de Passo Fundo**, Passo Fundo, RS – 206) **R. Nazareth**, Belem, PA – 207) **R. Pampa**, G. Rosário, Porto Alegre, RS – 208) **R. Cachoeira de Itapemirim**, Sete de Setembro 2, Cachoeira de Itapemirim, ES – 209) **E. Baré**, Cuiba, MT. 210) **Empreza Jornal do Comercio**, Garanhuns, PE – 211) **R. Sul Riograndense**, Erechin, RS – 212) **R. Dif. do Amazonas**, J. Sarmento 106, Manaus, AM – 213) **Soc. Ubaense**, Uba, MG – 214) **R. Dif. Guarapuava**, C. P. 13, Guarapuava, PR. 215) **R. Cl. Hertz**, Marechal Deodoro 220, Franca, SP – 216) **R. Tupanci**, 15 de Novembro 717, Pelotas, RS – 217) **R. Presidente Wenceslau**, Av. Newton Prado, Pres. Prudente, SP – 218) **R. Capibaribe de Recife**, S. Campos 259, Recife, PE – 219) **R. Cl. Pontagrossence**, C. P. 114, Ponta Grossa, PR. 220) **R. America**, Av. Angelica 430, São Paulo, SP – 221) **R. Educacão Rural**, Campo Grande, MT – 222) **R. Cl. do Piaui**, Teresina, PI – 223) **R. Gazeta de Alagas**, Maceió, AL – 224) **R. Ibituruna**, Av. Minas Gerais 976, Governador Valadares, MG. 225) **R. Cultura de Maringa**, 15 de Novembro 391, Maringa, PR – 226) **R. Carijós**, Ao. Pena 273, Conselheiro Lafaite, MG – 227) **R. Cl. Metropole**, Av. Pres. Roosevelt 1406, Porto Alegre, RS – 228) **R. Cultura de Cuiaba**, Cuiaba, MT – 229) **R. Dirceu de Marilia**, Dom Pedro 156, Marilia, SP. 230) **R. Dif. Cultura de Pelotas**, C. P. 268, Pelotas, RS – 230a) **R. Progreso**, Maceió – 231) **R. Herval do Oeste Ltda**, C. P. 370, Joaçaba, SC – 232) **R. Cultura de Piaui**, Teresina, PI – 233) **R. Dif. A. Voz da Amazonia**, Manaus, AM – 234) **R. Operaria de Araxa**, Maciel 226, Araxa, MG. 235) **R. Diamantina**, Diamantina, MG – 236) **Soc. Educadora de Itajuba**, Itajuba, MG – 237) **R. Cl. de Blumenau**, C. P. 61, Blumenau, SC – 238) **Empresa Jornal do Comercio**, Triumfo, PE – 239) **R. Dif. do Para**, Santo Antonio 491, Belem, PA. 240) **R. Arapuan**, D. de Caxias 550, João Pessôa, PA – 241) **R. Gurupi**, Ao. Pena 46, São Luis, MA – 242) **R. Soc. Oeste Catarinense**, Chapecó, SC – 243) **R. Guarathan**, Dr. Bozano 1380, Santa Maria, RS – 244) **R. Dif. Sul da Bahia**, C.P. 19, Itabuna, BA 245) **R. Estadual**, Canoinhas, SC – 246) **R. Uirapuru de Fortaleza**, C.P. 740, Fortaleza, CE – 247) **R. Alvorada**, Tiradentes, s/n°, Marau, RS – 248) **R. Continental do Recife**, Palma 167, Recife, PE – 249) **R. Dif. de Iguape**, Osasco, SP. 250) **R. Tingui**, Piraquara, PR – 251) **R. Sul Fluminense**, C.P. 19, Barra Mansa, RS – 252) **R. Dif. de Pesqueira**, Av. Dr. Jm. de Brito 427, Pesqueira, PE – 253) **R. Jornal de Minas**, Belo Horizonte, MG – 254) **R. Porto Alegre**, Porto Alegre, RS. 255) **R. Educadora de Cariri**, Cariri, CE 256) **R. Emis. Veranense**, Veranópolis, RS – 257) **R. Dif. de Rio Preto**, São José do Rio Preto, SP – 258) **R. América**, Rua Consolação 166, São Paulo, SP – 259) **R. Tamoio**, Fortaleza, CE. 260) **R. Imbiara de Araxá**, C.P. 19, Araxá, MG – 261) **R. Triumfo**, Cel. Vic 456, Porto Alegre, RS – 262) **R. Vera Cruz**, Rua Buenos Aires 168, Rio, GB – 263) **R. Cl. de Teresina**, Teresina, PI – 264) **R. Cl. de Tupá**, C.P. 39, Tupá, SP. 265) **R. Baré**, Ribeiro 566, Manaus, AM – 266) **R. Cl. de Santos**, J. Cabalero 60, Santos, SP – 267) **R. Caturite**, Peregrino de Carvalho 321, Campina Grande, PB – 268) **Campos Dif.**, Santos Dumont 36, Campos RJ – 269) **R. Coroados**, C.P. 33, Curitibanos, SC. 270) **R. Iracema de Fortaleza**, Praça M. Linhares, Sobral, CE – 271), **R. Cl. de Rio Claro**, Treis 1423, Rio Claro, SP – 272) **R. Emis. Convençã do Itu**, F. Peixoto 1386, Itu, SP – 273) **R. Soc. Muriaé**, Praça J. Pinheiro 10, Muriaé, MG – 274) **R. Espinhares de Patos**, Rua Barbosa 515, Patos' PB. 275) **R. Cl. Epitacio**, Pres, Epitacio, SP – 276) **R. Progresso**, Av. P. A. Filho, s/n°, Novo Hamburgo, RS – 277) **R. Araripé**, Nelson de Asencar 90, Crato, CE – 278) **Soc. Emiss. Continental**, Trez: de Maio 49, Campos, RJ – 279) **R. Dif. A. Voz de Bage**, C. P. 157, Bage RS. 280) **R. Reporter** C.P. 73, Ijui, RS – 281) **R. Dif. de Floriano**, Floriano, PI – 282) **R. Novo Horizonte**, C. P. 5, Novo Horizonte, SP – 283) **R. Nordeste, Nova Cruz**, RN – 284) **R. Cultura do Nordeste**, Ed. S. José, Caruaru, PE – 285) **R. Cultura de Santo Amaro**, Santo Amaro, BA.

CHILE

L.T: GMT – 4 h – Pr.L: Spanish.

ASOCIACION DE RADIODIFUSORAS DE CHILE (ARCHI)
ADDR: Cas. 10476, Santiago de Chile. Te: 34509. Cable: Archi – L.P: Pres: R. Vergara Santa Cruz. Vice Pres: G. Cortés Cruz. Mgr: J. Menadier Carrasco.

STATIONS: SW: Call letters CE are used for all zones – MW: Call letters CA, CB, CC and CD indicate: A = No. Zone, B = Central Zone, C = So. Zone and D = Antarctic Zone. The figures indicate the freq. in kc minus one cipher, f. inst. CB82 = Central Zone 820kc.
St's not associated with ARCHI: 9, 11, 14, 30, 31, 33, 39, 52, 66, 73, 85, 89, 91, 92, 98, 112, 116, 117, 118.

Short Waves:

	Call	kc	m	kW	Name	h of tr.
1)	CE595	5955	50.39	1	R. Nuevo Mundo, Santiago:	11.00–05.30
2)	CE597	5975	50.21	10	Emis. Presidente Balmaceda:	10.00–05.00
3)	CE601	6010	49.92	0.25	R. Norte, Antofagasta	10.50–04.30
4)	CE603	6030	49.75	1	R. Mineria, Talca	11.00–04.00
5)	CE605	6050	49.59	0.5	R. Libertad, Antofagasta	11.00–04.00
6)	CE607	6075	49.38	5	Soc. Nac. de Minería	11.00–05.30
7)	CE610	6100	49.18	1	R. Calama	11.00–04.00
8)	CE611	6115	49.06	5	Soc. Nac. de Agricultura	11.00–05.00
9)	CE613	6135	48.90	10	R. Universidad de Concepción	12.00–04.00
10)	CE615	6150	48.78	5	La Voz de Chile, Santiago	11.00–04.30
11)	CE617	6170	48.62		R. Universidad Técnica del Estado, Santiago:	17.00–04.00
12)	CE619	6190	48.47	10	Corp. Chilena Broadc.	11.00–04.00
12)	CE950	9500	31.58	1	Corp. Chilena Broadc.	11.00–04.00
13)	CE952	9520	31.51	1	R. El Morro, Arica	11.00–04.30
14)	CE955	9550	31.41	1	R. Valentin Letelier, Valparaiso Mon–Fri 16.30–18.30, 23.00–03.00; Sat–Sun 20.00–03.00	
15)	CE956	9560	31.38	10	Diego Portales, Santiago	11.00–05.00
2)	CE960	9600	31.25	1	R. Pres. Balmacéda, Santiago	10.00–05.00
16)	CE965	9650	31.09	1	R. Yungay, Santiago	11.30–06.30
10)	CE970	9700	30.93	1	La Voz de Chile, Santiago	11.00–04.30
1)	CE1174	11740	25.55	5	R. Nuevo Mundo, Santiago	11.00–05.30
8)	CE1181	11810	25.40	5	Soc. Nac. de Agricult.	11.00–05.00
17)	CE1185	11850	25.32	1	R. Cruz del Sur, Santiago	10.45–04.10
10)	CE1190	11900	25.21	5	La Voz de Chile, Valparaiso	10.30–04.30
6)	CE1196	11960	25.08	5	Soc. Nac. de Minería	11.00–05.30
6)	CE1511	°15115	19.85	5	Soc. Nac. de Minería	
12)	CE1515	15148	19.80	1	Corp. Chilena Broadc.	11.00–04.00
8)	CE1530	15300	19.61	5	Soc. Nac. de Agricultura	

Medium Waves: °=also on Shortwave.

Call	kc	kW	Call	kc	kW	Call	kc	kW
18) CB54	540	1	51) CD103	1030	1	81) CB141	1410	1
19) CD54	540	1	52)	1030		82) CD141	1410	0.1
8) CB57	°570	50	53)	1030	0.1	83) CA142	1420	0.1
20) CA59	590	1	6) CB106	°1060	100	84) CB142	1420	1
21) CC59	590	1	54) CD108	1080	1	85) CC142	1420	0.25
22) CA62	620	1	55) CA109	1090	1	86) CC143	1430	1
23) CC62	620	10	4) CC109	1090	1	87) CD143	1430	1
24) CB63	630	1	56) CD109	1090	1	88) CB144	1440	
25) CA63	630	0.1	57) CB111	1110	1	89) CB145	1450	0.25
26) CB63	630	1	58) CD111	1110	1.5	90) CD145	1450	0.25
27) CA64	640	1	59) CD112	1120		91) CD145B	1450	2.5
28) CD64	640	10	12) CB114	°1140	50	92) CA146	1460	
29) CB66	660	50	15) CB118	°1180	50	16) CB146	1460	1
9) CC68	°680	10	60) CA120	1200	1	93) CB147	1470	1
30) CB69	690	10	8) CD120	1200	1	94) CC148	1480	0.25
10) CB73	°730	10	11) CB121	°1210	1	95) CD148	1480	1
10) CB76	°760	75	61) CA124	1240	1	96) CB149	1490	1
5) CA78	°780	1	62) CB124	1240	1	97) CA150	1500	10
31) CB78	780	1	63) CC124	1240	1	98) CB150	1500	0.5
32) CD78	780	1	64) CA125	1250	1	99) CC151	1510	1
33) CA82	820	0.25	65) CB125	1250	1	100) CC152	1520	1
34) CB82	820	1	66) CD125	1250	1	101) CD152	1520	0.1
35) CC82	820	1	67) CC126	1260	1	102) CA153	1530	
36) CD82	820	1	3) CA127	°1270	1	103) CB153	1530	1
37) CB84	840	10	6) CB127	°1270	10	104) CC153	1530	1
38) CD84	840	1	2) CB130	°1300	10	13) CA154	°1540	10
39) CB89	890	5	68) CA132	1320	0.25	105) CC154	4540	0.25
40) CC89	890	1	69) CC132	1320	10	106) CB155	1550	0.1
41) CD89	890	1	70) CB133	1330	2	107) CC155	1550	0.25
42) CC90	900	1	71) CC133	1330	1	108) CD155	1550	0.25
1) CB93	°930	10	72) CD133	1330	1	109) CB156	1560	0.1
43) CB96	960	10	73) CA134	1340	0.25	110) CC156	1560	0.1
7) CA97	°970	1	74) CB134	1340	1	111) CD156	1560	0.1
44) CB97	970	1	75) CB135	1350	1	112) CB157	1570	0.25
45) CC97	970	1	76) CD135	1350	1	113) CC157	1570	0.25
46) CD97	970	1	77) CD135B	1350	1	114) CB159	1590	0.25
47) CA101	1010	0.25	78) CA136	1360	1	115) CC159	1590	0.25
48) CB101	1010	10	9) CC136	°1360	10	116) CB160	1600	
49) CD101	1010	1	17) CB138	°1380	50	117) CB160A	1600	0.25
14) CB103	°1030	1	79) CA140	1400	0.25	118) CC160	1600	
50) CC103	1030	0.1	80) CC140	1400	1			

Chile

Short Waves:
1) Cas. 9255, Santiago. **Te:** 382392. **Cable:** R. Nuevo Mundo – **L.P:** Dir. Gen: J. Raggio – **D.Prgr: N:** 11.30, 12.30, 13.00, 14.00, 15.00, 16.00, 17.15, 18.00, 19.00, 20.00, 21.00, 22.00, 23.00, 01.00, 02.00, 03.00 – **Ann:** "Estas son las Emisoras Nuevo Mundo de Santiago de Chile, que transmiten por CE93 onda larga, CE1174 onda corta en la Banda de 25 metros, CE595 onda corta en 49 metros y su equipo de FM en 93.5Mc" – **V.** by QSL-card and letter. **Re.** in Sp, E.
2) Cas. 13650, Santiago. **Te:** 88720. **Cable:** Prebal – **L.P:** Dir. Gen: E. Mac. Donald. – **D.Prgr: N:** 10.00, 11.05, 17.15, 01.30, 04.40+short N. every h on the h – **Int-Sig:** Gong with notes from "Los Copihues Rojos"

V. by QSL-card. Recordings accepted.
3) Cas. 556, Antofagasta. **Te:** 21822 – **L.P:** J. Cvitanic. Dir. Tec: R. Olivares M – **D.Prgr: N:** 11.30, 12.15, 17.00, 17.15, 00.15, 02.00 +short N every h. **V.** by QSL-card. Recordings accepted. Prgr. sched. free.
4) Cas. 21-D, Talca. **Te:** 33076 – **L.P:** Dir: A. Hasbun.
5) Cas. 457, Antofagasta. **L.P:** A. Cajiao – **D.Prgr: N:** 12.00, 17.30, 01.00, 02.30.
6) CB106: Cas. 2626, Santiago. **Te:** 381341. **Cable:** Radiomineria. CB127: Cas. 337, Vina del Mar – **L.P:** CB106: Dir. Gen: L. H. Videla P. Mgr: A. Santa Cruz. Dir. Prgr: R. Rojas R. Dir. Tec: R. Fuentes A. CB127: Mgr: L. Muños – **D.Prgr:** CB106: 24 h. **N:** 10.00, 11.00, 12.00, 16.45, 17.30, 01.00, 01.45, 02.30 – **Ann:** "Santiago de Chile, R. Soc. Nac. de Mineria" – **Int-Sig:** Gong – **V.** by QSL-card. **Re.** in E or Sp.
7) Cas. 1, Calama. **Te:** 10 – **L.P:** Dir: P. Vergara Keller. Dir. Tec: S. Wierckinsky – **D.Prgr: N:** 11.02, 12.00, 16.45, 17.30, 00.15, 02.30 – **Ann:** "Transmite CA97, CE610 en 49 metros, R. Calama de Calama, República de Chile" – **V.** by letter. Recordings accepted.
8) CB57: Cas. 40-D, Santiago. **Te:** 64660. CD120: Cas. 327, Los Angeles. **Te:** 517 – **L.P:** CB57: Dir: E. Echeverria M. CB120: Dir: G. Jimenez – **D.Prgr: N:** 11.30, 17.30, 01.30. Also on the h. from 13.00. **Ann:** "CB57 R. Agricultura de Santiago, Chile, sus estaciones en onde corta en 25 y 49 m---" – **V.** by QSL-card or letter. Recordings accepted.
9) Cas. 2337, Concepción. **Te:** 23207 – **L.P:** Mgr: F. Dussuel. Dir. Tec: O. Sa. Martin – **D.Prgr: N:** 12.15, 17.15, 01.30. **Wrp:** 01.30 – **L.L:** French 14.30, 23.30 – **Ann:** "Transmite R. Universidad de Concepción CC68 en Onda Larga, CE613 en Onda Corta en la Banda 49 metros y con su equipo de FM en 95.1Mc, desde la Ciudad Universitaria, Concepción, Chile" – **V.** by QSL-card and letter. **Re.** in E and Sp – **Pub:** Prgr.schedule on request.
10) CB76/CE615/CE970: Cas. 13130, Santiago. **Te:** 62391. CB73/CE1190: Cas. 37V. Valparaiso. **Te:** 7642. **Cable:** Vitalradio – **L.P:** CB76: Dir. Gen: C. Vial C. CB73: Gen. Mgr: R. Reyes B. Dir. Tec: A. Elsidieth. Dir. Prgr: M. Rodriguez G. **D.Prgr: N:** CB76/ CE615/ CE970: 11.30, 12.15, 13.00, 16.00, 16.45, 17.15, 18.00, 19.00, 19.20, 20.00, 21.00, 22.00, 23.00, 00.15, 02.00; CB73/CE1190: 11.00, 11.30, 12.00, 13.00, 14.00, 15.00, 16.00, 16.45, 17.15, 18.00, 19.00, 20.00, 21.00, 22.00, 22.30, 00.00, 02.00, 03.00, 04.00 – **Ann:** "Emisoras La Voz de Chile, La Cooperativa". CB73: "CB73 y CE1190 onda corta en la banda de 25 m, estaciones en Valparaíso de Radios Cooperativa – La Voz de Chile" – **Int-Sig:** Gong with central theme of "Pomp and Circumstance" – **V.** by letter. Recordings accepted.
11) Av. Ecuador 3469, Santiago. **Te:** 92981 – **L.P:** Dir: G. Vidal. Dir. Tec: J. Arenas K. **D.Prgr: N:** 12.45, 17.15, 00.00. **L.L:** W 23.30 (English Mon/Wed/Fri; French Tues/Thurs/Sat) – **V.** by letter. Recordings accepted.
12) Cas. 244V, Santiago. **Te:** 63674 – **L.P:** Dir: S. Fernandez – **D.Prgr: N:** Every h on the h – **Ann:** "Transmite CB114, R. Corporación, Santiago de Chile, R. Corporación en el mejor lugar, su hogar".
13) Cas. 463, Arica. **Te:** 1402 – **L.P:** Dir: C. Nieto G – **D.Prgr:** 11.00–06.00 – **V.** by letter.
14) Box 211V, Valparaiso – **L.P:** Dir: R. Allu – **Ann:** "Esta es R. Valentin Letelier, de la Escula de Derecho de Valparaiso, dela Universidad de Chile, transmitiendo en Onda Larga CB103, en 1030kc, en Onda Corta CE955, en 9550kc, y en FM CE104.3 en 104.3Mc por segundo" – **V.** by QSL-card or letter. **Re.** in Sp or E.
15) CB118/CE956: Cas. 13962, Santiago. **Te:** 68279 CB59: Cas. 98V, Valparaiso. CC108: Cas. 21-D, Talca – **L.P:** Dir. Gen: R. Tarud S. Dir. Tec: A. Hasbun A – **D.Prgr: N:** 11.30, 12.00, 13.00, 14.00, 15.00, 16.00, 19.00, 20.00, 21.00, 23.00, 04.57.
16) Cas. 3041, Santiago. **Te:** 31583 – **L.P:** Mgr: H. Beweis – **Ann:** "CB146 y CE965 Estacione de R. Yungay de la Corporación de Radiodifusion, Santiago de Chile" – **Int-Sig:** First movement of the song "Donde el Azul de la Noche encuentra el Ove del Dia" – **V.** by letter.
17) Plaza Bulnes 47, Santiago. **Te:** 62055 – **L.P:** Dir. Gen: M. Parada C. Mgr: C. Poblete. Dir. Tec: P. del Campo B. **D.Prgr: N:** 12.00, 14.00, 16.00, 17.45, 20.00, 22.00, 00.00, 01.45 – **Ann:** "Estas son las emisoras Cruz del Sur, Santiago de Chile, que transmiten en CB138, onda larga, CE1185, onda corta, banda de 25 m---" – **V.** by letter. Recordings accepted. – **V.** All re. to be sent to Sr. V. Hugo Olguin D, Departamento de Relaciones Internacionales, and will be answered by QSL-card or letter.

Medium Waves:
Generally 11.00–04.00, exc where indicated.
18) **R. Ignacio Serrano,** Cas. 110, Melipilla. **L.P:** Dir: J. Massoud.
19) **R. Sur,** Cas. 60-D, Valdivia. **Te:** 641. **L.P:** Dir: E. Charpentier.
20) **R. Mineria,** Cas. 1060, Antofagasta. **L.P:** Dir: H. Loredo.
21) **R. Condor,** Cas. 486, Concepción. **Te:** 25801. **L.P:** Dir: A. Hérnandez.
22) **R. Norte Verdes,** Cas. 252, Ovalle. **L.P:** Dir: F. Morales.
23) **Nueva R. El Sur,** Cas. 482, Concepción. **L.P:** Dir: O. Saez.
24) **R. La Reina,** Cas. 244V, Santiago. **L.P:** Dir: M. Lavin.
25) **R. Chañaral,** Comercio 53, Chañaral. **L.P:** Dir: H. Garrao.
26) **R. Pres. Prieto,** Cas. 37V, Valparaiso. **L.P:** Dir: R. Reyes.
27) **R. Esmeralda,** Cas. 209, Iquique. **Te:** 572. **L.P:** Dir: J. Fuster H.
28) **R. Cautin,** Cas. 40D, Temuco. **Te:** 31695. **L.P:** Dir: C. Spahie.
29) **Nueva R. Chilena.** Philips 40, Santiago. **L.P:** Dir: E. Menchaca.
30) **R. Santiago,** Cas. 10195, Santiago. **Te:** 36228. **L.P:** Dir: R. Vergera. Dir. Tec: P. del Campo.
31) **R. Caupolican,** Cas. 506, Valparaiso. **L.P:** Dir: Sra. L. D'ambra.
32) **R. La Frontera,** Cas. 516, Temuco. **Te:** 32140. **L.P:** Dir: D. de Mayo.
33) **R. Pampa,** P. de Valdivia. 34) **R. del Pacifico,** Cas. 3591, Santiago. **Te:** 87497. **L.P:** Dir: R. Vivado & J. Quinteros. **D.Prgr:** 24 h.
35) **R. Almirante Latorre,** Cas. 358, Talcahuano. **L.P:** Dir: A. Deij.
36) **R. Concordia,** Cas. 119, La Union. **Te:** 20. **L.P:** Dir: C. Figueroa.
37) **R. Portales,** Cas. 89-V, Valparaiso. **Te:** 57657. **L.P:** Dir: N. Tarud.
38) **R. Llaima,** Yungay 154, Curacautin. **L.P:** Dir: Sra. R. Valenzueza.
39) **R. Bulnes,** Cas. 1555, Santiago. **L.P:** Dir: C. Briceño.
40) **R. Interamericana,** Cas. 97, Concepción. **Te:** 21446. **L.P:** Dir: M. Fonseca. – 41) **R. Polar,** Cas. 13-D, Punta Arenas. **Te:** 21902. **L.P:** Dir: P. Torres. **D.Prgr:** 11.30–04.00. **V.** by letter.
42) **R. Nuble,** Cas. 267, Chillan. **Te:** 21742. **L.P:** Dir: H. Vaccaro.
43) **R. José Miguel Carrera,** Tenderini 115, Santiago. **L.P:** Dir: O. Pizarro – 44) **R. Soc. Nac. de Agricultura,** Cas. 90, Valparaiso. **Te:** 59352. **L.P:** Dir: A. Coronel.
45) **R. Lautaro,** Cas. 214, Talca. **Te:** 31435. **L.P:** Dir: J. Mandiola.
46) **R. Patagonia,** Cas. 53, Coyhaique. **L.P:** Dir: L. A. Ojeda.
47) **R. Coya,** Maria Elena. **L.P:** Dir: R. Oñat.
48) **R. Magallanes,** Cas. 13940, Santiago. **Te:** 33615. **L.P:** Dir: A. Benedicto. – 49) **R. Llanquilhue,** Cas. 356, Puerto Montt. **Te:** 2234. **L.P:** Dir: Salinas.
50) **R. El Roble,** Cas. 37, Parral. **Te:** 25. **L.P:** Dir: J. Bogazy.
51) **R. Chiloé,** Cas. 106, Castro. **L.P:** Dir: A. Velasquez.
52) **R. Payne,** Cas. 97, Puerto Natales. **L.P:** Dir: J. Navarro.
53) **R. Malleco,** Cas. 204, Victoria. **L.P:** Dir: C. Cockbaine.
54) **R. Camilo Henriquez,** Cas. 28-A, Valdivia. **L.P:** Mgr: H. Werkmeister – 55) **R. La Portada,** Cas. 410, Antofagasta. **Te:** 23523. **L.P:** Sra. Raymunde Prieto – 56) **R. Austral,** Cas. 40-D, Punta Arenas. **Te:** 23135. **L.P:** Dir: F. Mihovilovic & V. Turina.
57) **R. Recreo,** Cas. 596, Viña del Mar. **L.P:** Mgr: E. Goday. Dir. Tec: J. C. Tribuzio. **D.Prgr:** 12.00–04.00 – 58) **R. Sago,** Cas. 35-O, Osorno. **L.P:** Dir: P. Burgos. **D.Prgr:** 11.30–04.00.
59) **R. General Merchant,** Puerto Aysen. **L.P:** Dir: D. Martinez.
60) **R. Almirante Blanco Encalada,** Cas. 2001, Tocopilla. **L.P:** Dir: A. Arce – 61) **R. del Salitre,** Cas. 7-D, Iquique. **L.P:** Dir: F. Brito.
62) **R. Vina del Mar,** Cas. 534, Viña del Mar. **L.P:** Dir: J. Venegas.
63) **R. Talca,** Cas. 450, Talca. **Te:** 31818. **L.P:** Dir: S. Matamala.
64) **R. Mineria la Serena,** Cas. 118, La Serena. **L.P:** Dir: A. Pino.
65) **R. Andrés Bello,** Mac Iver 142, Santiago. **L.P:** Mgr: J. Morris.
66) **Universitaria Tecnico del Estado,** Valdivia – 67) **R. Condell,** Cas. 492, Curico.
68) **R, Estrella del Norte,** Cas. 13, Vallenar. **L.P:** Dir: L. Morales.
69) **R. Simon Bolivar,** Cas. 318, Concepción. **L.P:** Dir: A. Jaén.
70) **R. Prat,** Cas. 10210, Santiago. **Te:** 30107. **L.P:** Dir: P. Valenzuela. **D.Prgr:** 11.00–05.40.
71) **R. La Discusión,** Cas. 14-D, Chillan. **L.P:** Dir: A. Lagos.
72) **R. Vicente Perez Rosales,** San Felipe 80, Puerto Montt. **L.P:** Dir: O. Mesa H – 73) **R. Toco,** Cas. 808, Tocopillo. **L.P:** Dir: R. Oñat.
74) **R. Portena,** Cas. 887, Valparaiso. **L.P:** Dir: J. Blaya.
75) **R. Panamericana,** Agustinas 975, Santiago. **L.P:** Dir: F. Claro.
76) **La Voz del Sur,** Cas. 53, Punta Arenas. **Te:** 22253. **L.P:** Dir: J. Babarovic. **D.Prgr:** 11.30–04.00.
77) **R. Pudeto,** Edif. Yuri, Ancud. **L.P:** Dir: Sra. J. Castro.
78) **R. Riquelme,** Cas. 92, Coquimbo. **L.P:** Dir: C. Salamanca.
79) **R. Atacama,** Cas. 57, Copipo. **Te:** 171. **L.P:** Dir: A. Sidgmann.
80) **R. Araucania,** Cas. 462, Concepción. **L.P:** Dir: R. Arjona.
81) **R. Valparaiso,** Cas. 1096, Valparaiso. **L.P:** Dir: J. O'Shee.
82) **R. Loncoche,** P.O. Box 351, Loncoche. **Te:** 61. **L.P:** Dir: M. Téllez.
83) **R. Alonso de Ercilla,** Constitución 26, Illapel. **L.P:** H. Pinochet.
84) **R. Nacional,** Cas. 9987, Santiago. **Te:** 31782. **L.P:** Mgr: L. H. Sorrel.

85) **R. Maule**, Cas. 196, Cauquenas – 86) **R. El Libertador**, Cas. 102, Rancagua. **Te:** 22032. **L.P:** Dir: M. Galleos – 87) **R. Eleutario Ramirez**, Ramirez 652, Osorno. **L.P:** Dir: R. Ramirez – 88) **R. Sergento Candelaria**, Ahumada 131, Santiago. **L.P:** Dir: A. Castillo. 89) **Univ. Tecnica Santa Maria**, Cas. 110-V, Valparaiso. **L.P:** Dir: C. Ceruti. **D.Prgr:** 01.00–02.30.
90) **R. Arauco**, Cas. 6, Angol. **L.P:** Dir: J. Abasolo – 91) **R. Turismo**, Puerto Varas.
92) **R. Antofagasta**, Cas. 439, Antofagasta. **L.P:** Dir: A. Garcia.
93) **R. Sargento Aldea**, Cas. 38, San Antonio. **L.P:** Dir: R. Filippi.
94) **R. Independencia**, Cas. 132, Molina. **L.P:** Dir: J. Aravena. **D.Prgr:** 11.00–06.00. **V.** by QSL-card – 95) **R. Baquedaño**, Cas. 758, Valdiva. **Te:** 1510. **L.P:** Dir: C. Cockbaine.
96) **R. La Verdad**, Los Serenos 326, Santiago. **L.P:** Dir: G. Jaques.
97) **R. Patricio Lynch**, Vivar 489, Iquique. **L.P:** Dir: L. Roldán.
98) **R. Sudamerica**, Cas. 1346, Santiago. **L.P:** Dir: M. Casabianca.
99) **R. Rancagua**, Cas. 21, Rancagua. **Te:** 462. **L.P:** Dir: J. Romero.
100) **R. Soberania**, Cas. 11-D, Linares. **Te:** 277. **L.P:** Dir: R. Abasolo.
101) **R. Anibal Pinto**, Cas. 242, Lautaro. **L.P:** Mgr: Sra E. Cortéz.
102) **R. Diego de Almeyda**, Pueblo Hundido. **L.P:** Dir: D. Figueroa (CA 153: R. Juan Godoy, Cas. 142, Copiapo).
103) **R. Chacabuco**, Cas. 370, Quillota. **L.P:** Dir: S. Achondo.
104) **R. El Carbon**, Cas. 66, Lota. **Te:** 63. **L.P:** Dir: N. Mosciatti.
105) **R. Centenario**, Cas. 18, San Javier. **Te:** 29. **L.P:** Dir: M. Gaete.
106) **R. Provincial**, Cas. 73, Putaendo. **L.P:** Dir: H. Arancibia.
107) **R. Manuel Rodriguez**, Cas. 147, San Fernando. **L.P:** Dir: L. Guerra – 108) **R. Regional**, Cas. 293, Traiguen. **Te:** 220. **L.P:** Dir: H.Cuadra.
109) **R. Limache**, Cas. 92, Limache. **Te:** 247. **L.P:** Dir: H. Arellano.
110) **R. Central**, Cas. 202, San Carlos. **Te:** 163. **L.P:** Dir: Victor Busto.
111) **R. Jerónimo de Alderete**, Cas. 351, Villarrica. **L.P:** Dir: N. Páez.
112) **R. Trasandina**, Cas. 307, Los Andes. **L.P:** Dir: R. Grez T.
113) **R. El Cobre**, Cas. 125, Rancagua. **L.P:** Dir: C. Aguirre.
114) **R. Aconcagua**, Cas. 100, San Felipe. **L.P:** Dir: R. G. Gonzáles.
115) **R. Rengo**, Edif. Municipal, Rengo. **L.P:** Dir: I. Gandarillas.
116) **R. Reloj**, Valparaiso – 117) **R. Chronos**, Plaza Bulnes 79, Santiago – 118) **R. Horario**, Concepción. **L.P:** Dir: E. Sánchez.

COLOMBIA

L.T: GMT –5 h – **Pr.L:** Spanish.
STATIONS: a) Gov st's – b) Cultural – c) Cultural or non-comm – d), e), f), g), i), m) Comm. Network st – n) Comm. st.
Short Waves: Call: HJ---. 11.00–05.00 exc. where indicated.

	Call	kc	m	kW	Name, h of tr.
2)b	GO	3250	92.31	10	Accion Cult. Popular, Sutatenza
2)b	GW	3260	92.02	10	Accion Cult. Popular, Sutatenza
1)a	AB	3290	91.19	25	R. Nacional, Bogota
3)c	IV	4755	63.09	2,5	Reina Colombia, Chiquinquira
4)c	KW	4775	62.84	1	Voz Maria, Bogota: 12.00–03.00
5)n	LW	4785	62.70	1	Ecos Combeima, Ibagué: 11.00–04.00
6)e	FU	4795	62.57	1	Voz Comercio, Armenia
7)c	AU	4805	62.43	0,5	Universidad Antioquia, Medellin
8)d	DD	4815	62.31	1	R. Valledupar, Valledupar
9)e	HC	4825	62.18	1	R. Nariño, Pasto: 10.45–05.00
10)n	AM	4835	62.05	1	R. Buenaventura, Buenaventura
11)n	GF	4845	61.92	1	R. Bucaramanga, Bucaramanga: 11.00–04.00
12)d	GT	4855	61.79	1	R. Neiva, Neiva: 23.00–02.00
13)n	BG	4875	61.54	1	Voz Norte, Cucuta
14)i	IW	4885	61.45	1	Voz Centro, Espinal
15)n	CH	4895	61.29	1	Voz Victor, Bogota
16)n	AG	4905	61.16	1	Emis. Atlántico, Barranquilla: 11.30–04.00
17)d	DE	4935	60.80	1	R. Villavicencio, Villavicencio
1)a	CQ	4955	60.54	50	R. Nacional, Bogota
18)n	AF	4965	60.42	2,5	R. Santa Fé, Bogota: 24 h
19)f	JG	4975	60.30	1	R. Internacional, Cucuta
20)c	GV	4985	60.18	10	Trasm. Independencia, Tunja: 11.00–19.30, 22.00–03.00
21)e	FW	5020	59.76	10	Transm. Caldas, Manizales: 24 h
22)n	IC	5035	59.58	1	Voz Caquetá, Florencia
23)e	DW	5050	59.41	1	Voz Medellin, Medellin: 10.30–05.00
2)b	CW	5060	59.29	25	Accion Cult. Popular, Sutatenza
2)b	GC	5075	59.11	25	Accion Cult. Popular, Sutatenza
2)b	GG	5095	58,88	50	Accion Cult. Popular, Sutatenza
24)i	CF	5960	50.34	1	Voz Bogotá, Bogota: 11.00–04.00
25)n	VN	5970	50.25	5	R. Horizonte, Bogota: 12.00–03.00
26)f	LY	5980	50.17	10	Voz Rio Grande, Medellin: 11.00–07.00
27)f	GR	5995	50.04	1	Voz Pueblo, Pereira: 12.00–04.00
28)i	FK	6010	49.92	10	Voz Amiga, Pereira: 12,00–04.00
1)a	ZJ	6030	49.75	1	R. Nacional, Bogota
29)f	CB	6040	49.67	10	Voz Tolima, Ibague
30)e	EX	6055	49.55	5	R. Pacifico, Cali: 11.00–06.00
2)b	HV	6075	49.38	10	Accion Cult. Popular, Sutatenza
31)n	DX	6085	49.30	1	Ecos Pasto, Pasto
32)f	PT	6095	49.22	5	R. Colosal, Neiva: 10.30–05.00
33)m	NV	6105	49.14	5	R. Vision, Medellin: 10.30–05.30
34)e	IQ	6115	49.06	1	Voz Llanos, Villavicencio: 13.00–05.00
35)f	KE	6125	49.98	1	R. Continental, Bogota: 24 h
36)f	NE	6140	48.86	1	R. El Sol, Cali: 24 h
37)f	EQ	6145	48.82	1	Voz Cauca, Popayan
38)e	KJ	6160	48.70	10	Emis. N. Granada, Bogota: 10.00–06.00
1)a	WT	6180	48.54	50	R. Nacional, Bogota
39)f	EZ	6195	48.43	1	Voz Cali, Cali: 11.00–05.00
1)a	ZM	9635	31.14	25	R. Nacional, Bogota
2)b	GQ	9750	30.77	10	Accion Cult. Popular, Sutatenza
1)a	ZN	11795	25.43	25	R. Nacional, Bogota
1)a	ZO	11825	25.37	25	R. Nacional, Bogota
2)b	GZ	11900	25.21	10	Accion Cult. Popular, Sutatenza
2)b	GL	15235	19.69	10	Accion Cult. Popular, Sutatenza
1)a	ZP	15335	19.56	25	R. Nacional, Bogota
1)a	ZQ	17865	16.80	25	R. Nacional, Bogota
1)a	ZR	21510	13.94	25	R. Nacional, Bogota
1)a	ZS	25750	11.65	25	R. Nacional, Bogota

Medium Waves: ° also on short wave.

Call	kc	kW	Call	kc	kW	Call	kc	kW
25) n KA	°540	10	74) f GU	1060	1	123) e DA	1260	1
1) a HF	550	10	16) n AH	°1070	10	124) n DV	1260	1
20) c GS	°560	10	18) n CG	1070	10	125) mET	1260	1
1) a ND	°570	100	75) d DZ	1080	1	126) f HU	1260	1
1) a HG	580	50	76) f JF	1080	5	127)e NO	1260	1
2) b CR	590	10	77) d BC	1090	10	128) mKZ	1270	1
40) n HJ	600	25	78) f FM	1090	10	129) mTX	1270	1
38) e KL	°610	25	79) d IH	1090	1	130) e AR	1280	1
41) g EL	620	10	80) d AT	1100	1	131) e EB	1280	1
42) f FD	630	20	81) d CN	1100	10	132) d LR	1280	1
43) e BJ	640	10	82) f NH	1100	1	133) g KN	1280	1
44) i JX	650	10	83) c DI	1110	9	134) f NQ	1280	1
45) f JM	660	10	84) d EW	1110	1	135) f CM	1290	1
46) g NX	670	10	14) i FZ	°1110	10	136) n EC	1290	1
47) e AQ	680	10	85) d GH	1120	5	17) d IA	°1290	1
48) mCZ	690	10	86) f JC	1120	1	137) n KY	1290	1
49) n CX	700	10	87) e KQ	1120	10	138) e TH	1290	1
5) n FT	°710	10	88) f AC	1130	10	139) e IR	1300	1
50) i AN	720	10	89) g CO	1130	5	140) f LD	1300	1
51) g CU	730	10	90) i DL	1140	1	141) d NB	1300	1
31) n HB	°740	10	91) n EV	1140	1	142) i AK	1310	2,5
52) d DK	750	50	92) f NS	1140	5	143) d DG	1310	1
53) e AJ	760	10	93) f TR	1140	10	144) d JZ	1310	1
54) i KH	770	30	94) n BT	1150	10	145) e FR	1320	1
55) n ZG	780	30	95) d FI	1150	1	146) n HT	1320	1
56) mDC	790	10	2) b GJ	1150	10	147) f NK	1320	1
57) f BW	800	10	96) i AZ	1160	5	148) n TA	1320	1
2) b CY	810	10	97) i BL	1160	2,5	149) n VT	1320	1
58) d ED	820	50	98) n CK	1160	10	150) i AD	1330	1
33) mDM	°830	10	99) c ZV	1160	5	151) e FE	1330	1
59) f BI	840	10	32) f DP	°1170	10	152) n MQ	1330	1
60) d KC	850	50	100) n DT	1170	1	13) n BF	°1340	1
61) f EP	860	10	101) f JE	1170	1	153) n FA	1340	1
29) f LA	°870	10	102) d FX	1180	1	154) n FB	1340	1
11) n GE	°880	10	103) e GK	1180	10	155) e HY	1340	1
24) i CE	°890	10	104) n CT	1190	5	9) e HA	°1340	1
39) f EY	°900	10	105) f CV	1190	10	156) g DS	1350	1
26) f DO	°910	25	106) n DF	1190	1	157) n EN	1350	1
62) i AE	920	10	107) n EO	1190	1	158) f FY	1350	1
35) f CS	°930	10	34) f BX	1200	2	159) f HW	1350	1
63) i GB	940	10	108) f CD	1200	1	160) n IG	1350	1
64) d FN	950	10	109) n IJ	1200	1	161) f FH	1360	1
2) b HN	960	10	110) i NF	1200	1	162) f GI	1360	1
15) n CI	°970	10	19) f BE	°1210	10	163) i BD	1370	1
36) f ES	°980	10	28) i FF	°1210	10	164) n BO	1370	1
23) e DB	°990	10	111) e AV	1220	10	37) f EA	°1370	0.75
1) a BU	1000	100	112) d FV	1220	10	165) n KX	1370	1
65) f BN	1010	10	113) e KR	1220	1	166) d NI	1370	1
66) mCC	1010	10	114) c NM	1220	2,5	167) e EJ	1380	1
67) f DQ	1020	1	12) d FP	°1230	10	168) d LG	1380	1
27) f FQ	°1020	10	115) n IL	1230	5	169) i KD	1380	1
68) f DJ	1030	5	116) n LK	1230	1	170) n NU	1380	1
30) e ER	°1030	10	6) e FG	°1240	5	171) n FO	1390	1
69) mAI	1040	5	117) d GN	1240	5	172) f NY	1390	1
70) e CJ	1040	5	10) n JA	°1240	1	173) n AS	1400	1
8) d BB	°1050	1	118) i AO	1250	1	174) e BK	1400	1
71) n DR	1050	1	119) n CA	1250	1	175) f JJ	1400	1
72) g NC	1050	1	120) n EM	1250	1	176) c KM	1400	0.25
73) f NG	1050	1	121) mHS	1250	1	177) e TJ	1400	1
21) e FJ	°1060	10	122) c HZ	1250	1	178) n BY	1410	1

Colombia

Call	kc	kW
7) c DU	°1410	0.5
179) mEI	1410	1
180) d FS	1410	1
181) i HM	1410	1
182) d AP	1420	1
183) d BH	1430	1
184) f BP	1430	1
185) e EG	1430	0.75
4)c KU	°1430	0.25
186) n BM	1440	1
187) n BZ	1440	1
188) mEK	1440	1
189) e FL	1440	1
190) e GM	1440	1
22) n IB	°1440	1
191) n NZ	1440	1
192) n NL	1450	1
193) n TY	1450	1
194) f AL	1460	1
195) c BA	1460	1
196) n BQ	1460	1
197) e JW	1460	1
198) i ZU	1460	1
199) n IM	1470	1
200) f NT	1470	1
201) n FC	1480	1
202) n TZ	1480	1
203) n AW	1490	1
204) n BS	1490	1
2) b EH	1490	1
205) e CL	1500	1
206) e GA	1500	1
207) c LJ	1500	1
208) i TW	1500	1
209) n ZH	1500	1
210) i HX	1510	1
211) mZA	1510	1
212) n GX	1520	1
213) n LI	1520	1
214) n LQ	1520	1
215) d LS	1520	1
216) c DN	1530	0.25
3) c GD	°1530	0.35
217) e JB	1530	1
218) f LE	1530	1
219) e BV	1540	1
220) c ZF	1540	0.25
221) n GY	1550	1
222) n LT	1550	1
223) n ZI	1550	1
224) c CP	1560	1
2) b GP	°1560	1
225) n LP	1560	1
226) c ZX	1560	0.25
227) i ZT	1570	1
228) e AY	1580	1
229) n KF	1580	1
230) f LC	1580	1
231) n IP	1590	1
232) n JQ	1590	1
233) i JH	1600	1

Abbreviations: Cl=Calle; Cr=Carrera.

1) a **INSTITUTO NACIONAL DE RADIO Y TV (Gov Net)** – **Addr:** Apt. Nac. 1824, Bogota – División Radio: Transv. 17 N. 565 **Te:** 414069 – **L.P:** Dir. Gen: W. Fadúl. Dir. Tec: J. E. Nassar – **D.Prgr:** 11.35–04.25 (Sun 13.50–04.10).

2) b **ACCION CULTURAL POPULAR** (R. Sutatenza Educ. Net) – **Addr:** Aéreo 1770, Bogota. **Te:** 420543. **Cable:** "Radiofonicas" – **L.P:** Dir. Gen: Rev. F. J. J. Salcedo G Mgr: F. Sarmiento O Dir. Prgr: F. Gutierrez R. Dir. Tec: P. Sanchez C.

c) Cultural or non-comm. st's.

d) **CARACOL – PRIMERA CADENA RADIAL COLOMBIANA (Comm. Net)** – **Addr:** Aéreo 9291, Bogota. **Te:** 349580. **Cable:** "Caracol" – **L.P:** Pres: F. Londoño H. Comm. Mgr. J. Alvarez **B. D.Prgr:** 11.00–05.00.

e) **RCN– RADIOCADENA NACIONAL (Comm. Net)** – **Addr:** Aéreo 1244, Medellin. **Te:** 428640. **L.P:** Pres: R. Jairo A. Mgr. B. Echeverri Bogota: Cr15 N. 1347 **Te:** 344805. **L.P:** Mgr A. Meza J.).

f) **TODELAR – CIRCUITO TODELAR DE COLOMBIA (Comm. Net)** – **Addr:** Aéreo 4392, Cali. **Te:** 89386 – **L.P.Pres:** B. Tobon de la Roche. Secr. Gen. H. Ilián. Comm.Mgr: N. Salazar R.

g) **RST – RADIO SISTEMA TRICOLOR DE COLOMBIA (Comm. Net)** – **Addr:** Aéreo 7766, Bogota **Te:** 321463 – **L.P:** Mgr: J. A. Vanegas R.

i) **UNION RADIO (Comm. Net)** – **Addr:** Aéreo 13018, Bogota **Te:** 419282 – **L.P:** Mgr: M. Rengifo.

m) **CRANSONAR (Comm. Net)** – **Addr:** Aéreo 3163, Medellin. **Te:** 419027 – **L.P:** Dir: Gen: J. Tobon de la Roche.

n) Comm.station.

3) **L.P:** R. P. Dominicos, Chiquinquira

4) Aéreo 16029, Bogota **Te:** 478763 **L.P:** Dir. Gen: Rev. F. J. V. Echeverri S. J. – Dir. Tec: H. A. Herrera. Dir. Prgr: A. Suarez S – **D.Prgr: N:** 12.30, 14.30, 01.30 **Ann:** "La Voz de Maria, R. Kennedy, una emisora popular para todos los gustos". **V:** by letter. Recordings accepted.

5) Cr 3a N. 1229, Ibague – **L.P:** Dir. Gen: J. Eugenio C. Dir. Tec: C. Estevez – **V.** by letter.

6) Cl 19 N. 1944, Armenia – **L.P:** L. Herrera C.

7) Cr. 43 No. 4796, Medellin.

8) Cl. 9 No. 4114. **Te:** 3178. **L.P:** Mgr: H. Aristizábel.

9) Aéreo 390, Pasto. **Te:** 1854. **Cable:** Radionariño. **L.P:** Mgr: C. Acósta – 10) Cl. 5, Cr. 2, Buenaventura.

11) Aéreo 572, Bucaramanga. **Te:** 5406. **L.P:** Dir. Gen: P. de Sorzano. Dir. Tec: G. Sorzano **J. D.Prgr: N:** 12.00, 17.00, 24.00. **Ann:** "Estas son las Emisoras de R. Bucaramanga, transmitiendo en sus freq's HJGF onda corta 4845kc, HJGE onda larga 1030kc, y HKSO FM 96.5Mc, R. Bucaramanga, primera Emisora del Oriente Colombiano" – **V.** by QSL-card. Re. in Sp. E.

12) Cr. 5a No. 5–28, Neiva. **Te:** 3199. **Cable:** Radioneiva. **L.P:** Mgr: G. Hernandez R. Dir. Tec: L. Carlos C. **D.Prgr:** 23.00–02.00. V. by letter. Recordings accepted. **F.Pl:** 10kW. – 13) Cucuta.

14) Cr. 7 No. 858, El Espinal. **Te:** 240. **L.P:** Mgr: J. Páva Navarro.

15) Cr. 7 No. 1135, Bogotá. **Te:** 421105. **L.P:** Mgr: A. Gaitan. **V.** by QSL-card.

16) Aéreo 174, Barranquilla. **L.P:** Mgr: M. A. Blanco.

17) Cl. 20 No. 2162, Villavicencio. **Te:** 2386. **L.P:** Mgr: J. Arcila M.

18) Aéreo 9338, Bogota. **Te:** 411482. **V.** by letter.

19) Aéreo 13000, Cucuta. **Te:** 4390. **L.P:** Mgr: L. E. Mantilla S.

20) Apt. Nacional 79, Tunja. **Te:** 2264. **L.P:** Dir: R. Castro J.

21) Aéreo 244, Manizales. **Te:** 26632. **L.P:** Mgr: I. Excobar U. Dir. Tec: E. Martinez. **D.Prgr: N:** 12.00, 17.30, 24.00. **Ann:** "Transmisora Caldas en Manizales filial del Sistema RCN, Radio Cadena Nacional". **V.** by letter. – 22) Florencia.

23) Aéreo 1244, Medellin. **Te:** 428640. **L.P:** Mgr: Dr. A. Jaramillo O. Dir. Tec: G. Llano. **D.Prgr: N:** Every h on the h. **Ann:** "Transmite R. Cadena Nacional, par su emisora La Voz de Medellin". **V.** by letter. Recordings accepted.

2) b. **D.Prgr's: On 5075/5095kc:** 10.20–14.00, 19.00–03.10; On 1560kc: 10.20–14.00, 18.45–03.10. **N:** 12.00, 23.20, 01.00, 03.00. **On 6075kc:** 10.20–03.10; On 590kc (Medellin): 10.30–05.00; On 810kc (Bogotá): 10.45–04.00; On 1150kc (Belencito): 10.45–03.10; On 1480kc (Pasto): 11.00–04.00. **Ann:** "R Sutatenza afiliada a la Confederación Latinoamericana para la Educación Fundamental Integral, transmite desde Sutatenza, en Boyacá República de Colombia". **V.** by QSL-card. Re. to Cr. 39A No. 1511, Bogotá. **Pub:** Prgr. bulletin (Monthly). **F.Pl:** 10kW st's in Barranquilla, Cali.

24) Aéreo 13018, Bogotá. **Te:** 348141. **L.P:** Mgr: M. Rengifo. **V.** by letter. – 25) Ave. Jimenez 540, Bogotá. **Te:** 439813.

26) Aéreo 1431, Medellin. **Te:** 437028. **L.P:** Dir. Gen: B. Tobón de la Roche. Mgr: J. Restrépo L. **Ann:** "Desde el R. Centro Todelar y sus Circuito Nacional de Emisoras transmite La Voz del Rio Grande HJDO 910kc onda larga, en Medellin, Colombia" – **V.** by letter. Recordings accepted.

27) Cr. 7 No. 1775, Pereira. **Te:** 2396. **Cable:** Voz Pueblo. **L.P:** Mgr: J. Mejia D. **V.** by letter.

28) Aéreo 89, Pereira. **Te:** 8872. **L.P:** Mgr: J. Jaramillo.

29) Aéreo 780, Ibagué. **Te:** 30297. **L.P:** Mgr: N. González. **V.** by letter or QSL-card.

30) Aéreo 2180, Cali. **Te:** 74110. **L.P:** Mgr: J. Córdoba M. **V.** by letter.

31) Aéreo 375, Pasto. **L.P:** Mgr: A. J. Menéses.

32) Cl. 6 No. 459, Neiva. **Te:** 5280. **Cable:** Colosal. **L.P:** R. Navarro. **Ann:** "Esta es R. Colosal, la mas potente Radiodifusora del Sur de Colombia, con equipos siliciconizados de Arco Esponjoso. Colosal, un nombre grande para una emisora poderosa. **V.** by letter.

33) Aéreo 3163, Medellin. **Te:** 419027. **L.P:** Dir. Gen: J. Tobón de la Roche. **V.** by letter. Rp.

34) Villavicencio. **Te:** 2657. **L.P:** Adm: B. Otéro L.

35) Aéreo 8467, Bogotá. **Te:** 341744. **L.P:** Mgr: M. Granados A. **V.** by letter.

36) Aéreo 1972, Cali. **Te:** 75320. **Cable:** Radiosol. **L.P:** Mgr: F. Franco G. **Ann:** "Esta es R. El Sol, 980kc, canal preferencial, onda corta 6140kc, banda internacional de 48 mts; del Circuito Todelar de Colombia, R. El Sol de Cali, en dos frequencias para cubrir toda la república". **V.** by letter.

37) Aéreo 535, Popayan. **Te:** 1770. **L.P:** Mgr: L. Burkardt. **V.** by letter.

38) Cr. 15 No. 1347, Bogotá. **Te:** 344805. **Cable:** Nuevagranada. **L.P:** Mgr: A. Meza J. **D.Prgr: N:** 12.00, 17.30, 23.30, 02.30, 04.45. **Ann:** "Transmite R. Cadena Nacional por su emisora Nueva Granada de Bogotá, RCN, el sistema radial más poderoso de Colombia, HJKL 610kc onda larga y HJKL 6160kc onda corta". **V.** by QSL-card. Re. in Sp, E. Recordings accepted – **F.Pl:** 50kW on 610kc.

39) Aéreo 4392, Cali. **Te:** 83090. **L.P:** Adm: L. Ruiz. **V.** by letter.

Medium Waves:

40) **R. Libertad**, Aéreo 2693, Barranquilla. **L.P:Dir:** N. Fayad Moises.

41) **R. Tricolor,** Av. 2 No. 2758, Cali. **Te:** 63812. **L.P:** Mgr: J. A. Vanegas, 24 h.

42) **R. Manizales**, Aéreo 67, Manizales. **Te:** 21030. **V.** by letter.

43) **La Voz Santa Marta**, Cr. 3 No. 1830, Santa Marta – 44) **Emisora Monserrate**, Aéreo 13018, Bogotá.

45) **R. Uno**, Apt. 1972, Cali. **L.P:** Mgr: B. Tobón M. **D.Prgr:** 10.00–05.00. **V.** by letter.

46) **R. Tricolor**, Medellin. 24 h – 47) **R. Miramar**, Aéreo 246, Cartagena.

48) **La Voz Colombia**, Aéreo 10556, Bogotá. **Te:** 437027. **L.P:** Mgr: **J.** Sánchez V – 49) **R. Oro**, Palmira.

50) **Emisoras Unidas**, Aéreo 154, Barranquilla. **Te:** 10120. Cable: Emisunidas – 51) **R. Tricolor**, Aéreo 7766, Bogotá.

52) **La Voz de Antioquia**, Cl. 53, No. 4680, Medellin. **Te:** 450838. **L.P:** Mgr: A. Toro M – 53) **La Voz Barranquilla**, Cl. 73 No. 41B, Barranquilla.

54) **Voz Amiga**, Bogotá – 55) **R. El Pais**, Edif. Lloreda, Cali.

56) **Ecos de la Montaña**, Aéreo 1864, Medellin – 57) **R. Atalaya**, Cl. 35 No. 2181, Bucaramanga – 58) **La Voz del Rio Cauca**, Cr. 1 No. 1839, Cali. **Te:** 72730 – 59) **Ondas Caribe**, Aéreo 757, Santa Marta.

60) **Emisora Nuevo Mundo**, Aéreo 9291, Bogotá. **Te:** 349580. **L.P:** St. Mgr: J. Alvarez B. Dir. Tec: M. Fric. **D.Prgr: N:** Every h on the h & 12.15, 18.15, 00.15. **Ann:** "Con Ustedes Emisoras Nuevo Mundo, sus emisoras Caracol en Bogotá". **V.** by letter. Recordings accepted.

61) **Voces de Occidente**, Cr. 14 No. 225, Buga. **L.P:** Mgr: R. Antonio A.

62) **Emisoras Fuentes**, Aéreo 1771, Cartagena – 63) **Voz Amiga**, Aéreo 4535, Cali – 64) **La Voz del Café**, Cl. 18 No. 847, Pereira. **Te:** 8941. **L.P:** Mgr: F. Maldonada.

65) **Voz Galeras**, Cr. 22 No. 1947, Pasto – 66) **Emisora Mil Veinte**, Aéreo 3855, Bogotá. **Te:** 437027 – 67) **Emisora Claridad**, Aéreo 2090, Medellin. **Te:** 81900 – 68) **La Voz Libertadores**, Aéreo 1030. Duitama.

69) **R. Kalamary**, Aéreo 397, Barranquilla. **L.P:** Mgr: E. Ariza.

70) **R. Melodia**, Aéreo 7766, Bogotá. **Te:** 444917. 12.00–05.00.

71) **La Voz Triunfo**, Cr. 51 No. 5131, Medellin. **L.P:** Mgr: L. E. Ramirez – 72) **Voz Nevado**, Ibague – 73) **R. Palmira**, Aéreo 280, Palmira. **L.P:** Mgr: O. Burckhardt – 74) **R. Bucarica**, Cl. 35 No. 2181, Bucaramanga.

75) **R. Reloj**, Cr. 53 No. 4680, Medellin. **Te:** 450515. **L.P:** Mgr: H. Restrepo A – 76) **R. Musical**, Cl. 11 No. 920, Cali – 77) **La Voz Cucuta**, Av. 5 No. 832, Cucuta. **Te:** 2035. **L.P:** Mgr: C. Perez A. 78) **La Voz Armenia**, Aéreo 617, Armenia – 79) **La Voz de Oriente**, Cr. 11 No. 1159, Sogamoso.
80) **R. Reloj**, Cr. 43 No. 7214, Barranquilla. **Te:** 47911. **L.P:** Mgr: L. Jaime E – 81) **R. Reloj**, Cl. 19 No. 848, Bogotá. **L.P:** Mgr: S. Ospina T – 82) **Ondas Rio**, Aéreo 503, Magangue – 83) **R. Bolivariana**, Aéreo 1178, Medellin. **L.P:** Dir: R. Saldarriága A – 84) **R. Reloj**, Cr. 1 No. 1839, Cali. **Te:** 87556. **L.P:** Mgr: R. Payán S.
85) **R. Comercio**, Cr. 36 No. 2150, Bucaramanga. **Te:** 25418. **L.P:** Mgr: R. Perez – 86) **R. Cartago**, Aéreo 2, Cartago – 87) **R. Tunja**, Tunja – 88) **Emis. Riomar**, Aéreo 2010, Barranquilla.
89) Transv. 6a No. 2710, Bogotá. **Te:** 349867. **L.P:** St. Mgr: V. M. Londoño E. Dir. Tec: J. Rios. **D.Prgr: N:** 11.30, 17.30, 23.30. V. by QSL-card. Prgr. schedule free.
90) **Voz Amiga**, Aéreo 1463, Medellin – 91) **La Voz del Valle**, Cali – 92) **R. Guatapuri**, Aéreo 51, Valledupar – 93) **R. Girardot**, Cl. 14 No. 1119, Girardot. – 94) **R. Catatumbo**, Aéreo 19. Ocaña.
95) **Pregones del Quindio**, Edif. Banco Cafetero, Armenia. **Te:** 1200 **L.P:** Mgr: L. Dávila M – 96) **Voz Sinu**, Aéreo 148, Monteria – 97) **Ondas Cienaga Grande**, Cienaga – 98) **El Mundo en Bogotá**, Cr. 7 No. 1714, Bogotá. **Te:** 429022. **L.P:** Mgr: A. Castaño C – 99) **R. Las Lajas**, Ipiales.
100) **R. Nutibára**, Cr. 50 No. 5275, Medellin – 101) **Emis. Villa Cespedes**, Aéreo126, Tulua – 102) **La Voz Ruiz**, Cr. 22 No. 2337, Manizales. **Te:** 2423. **LP:** Mgr: G. Aristizábal E – 103) **R. Santander**, Aéreo 1100, Bucaramanga – 104) **La Voz Costa**, Barranquilla.
105) **R. Cordilllera**, Aéreo 8467, Bogotá – 106) **R. Tumaco**, Tumaco.
107) **Ondas de. Valle**, Cr. 5 No. 1223, Cartago – 108) **R. Nueva Epoca**, Cr. 6 No. 755, Fusagasugá – 109) **R. Colibri**, Aéreo 4552, Medellin (Itagui).
110) **Sultana del Valle**, Aéreo 6045, Cali – 111) **R. Cordobesa**, Cl. 30 Cr. 3–4, Monteria – 112) **La Voz Litoral**, Cl. 72 No. 4363, Barranquilla. **Te:** 41844. **L.P:** P. Carbonéll – 113) **R. Juventud**, Cl. 12 No. 517, Bogotá – 114) **Emisora Cultural Bolivar**, Ipiales.
115) **Voz Americas**, Edif. Bolivar 1850 No. 5140, Medellin – 116) **R. Calidad**, Cali – 117) **R. Barranca Bermeja**, Edif. Sta. Fe, Barranca Bermeja – 118) **R. Vigia**, Aéreo 154, Barranquilla. **Te:** 10120. 24 h. V. by letter – 119) **R. Guadaira**, Bogotá.
120) **Voz Corozal**, Corozal – 121) **Voz Rio Zulia**, Cucuta – 122) **Emis. Mariana**, Pasto – 123) **Emis. Siglo XX**, Cr. 51 No. 5953, Medellin – 124) **R. Cacique**, Cajamarca.
125) **R. Bolivar**, Aéreo 4882, Cali – 126) **R. Morgan**, Edif. Hotel Morgan, S. Andres Isl – 127) **R. Duitama**, Cl. 16 Cr. 16, Duitama.
128) **Onda Libre**, Aéreo 520, Pereira – 129) **R. Compás**, Aéreo 1337, Giron.
130) **La Voz Cartagena**, Aéreo 246, Cartagena – 131) **Voz Cienaga**, Cienaga – 132) **R. Pasto**, Cr. 19 No. 1650 Ave. Las Americas, Pasto. **Te:** 2947. **L.P:** Mgr: A. González – 133) **R. Metropolitana**, Aéreo 7766, Bogotá. **Te:** 457073. 24 h – 134) **Voz Rio Suarez**, Barbosa.
135) **R. Sur**, Pitalito – 136) **R. Libertador**, Cr. 3 No. 1580, Cali. **L.P:** Mgr: R. Angulo – 137) **Ondas Puerto**, Cl. 15 No. 11A54, Girardot.
138) **R. Ritmos**, Medellin – 139) **R. Urabá**, Edif. Banco Popular, Turbo.
140) **R. S. Eugenio**, Cr. 15 No. 1532, S. Rosa de Cabal – 141) **Transmisora Guia**, Cl. 36 No. 2150, Bucaramanga. **Te:** 28088. **L.P:** Mgr: R. Pérez – 142) **Voz Patria**, Aéreo 231, Barranquilla. **L.P:** Dir: C. Vasallo – 143) **Transm. Rio**, Monteria – 144) **R. Quince**, Cl. 19 No. 848, Bogotá.
145) **Ondas del Huila**, Cl. 7 No. 324, Neiva – 146) **R. Furatena**, Chiquinquira – 147) **R. Luna**, Palmira – 148) **La Voz Independencia**, Medellin – 149) **Voz Tocarema**, Girardot.
150) **R. Vigia**, Aéreo 1771, Cartagena – 151) **La Voz de Pereira**, Cr. 18 No. 854, Pereira – 152) **Voz Chicamocha**, Piedecuesta – 153) **R. Caribe**, Barranquilla – 154) **La Voz Sabana**, Cr. 42 No. 1394, Bogotá. **Te:** 479167.
155) **Transm. Sucre**, F. H. Porras 2037, Sincelejo – 156) **La Voz Candelaria**, Medellin. **Te:** 50662. 10.00–05.00 – 157) **R. Sideral**, Aéreo 2146, Cali – 158) **La Voz de Chaparral**, Chaparral – 159) **Ecos del Rio**, Puerto Boyaca.
160) **Ondas Meta**, Villaviccncio – 161) **La Voz Anserma**, Anscrma.
162) **Emis. José A. Galán**, Socorro. **L.P:** Mgr: M. Rojas V – 163) **R. Guaimaral**, Cl. 9 Av. 3, Cucuta – 164) **R. Piloto**, Aéreo 320, Barranquilla.
165) **R. Mundial**, Aéreo 20333, Bogotá – 166) **R. Sabanas**, Cl. 24 No. 1831, Sincelejo. **Te:** 2992. **L.P:** Mgr: N. Miserque A – 167) **Armonias del Palmar**, Cr. 29 No. 3290, Palmira. **Te:** 3344. **L.P:** Mgr: J. Bejarano D – 168) **La Voz Dorada**, Cr. 3 No. 255, La Dorada. **Te:** 7171. **L.P:** Mgr: J. Arcila – 169) **Armonias del Sur**, Aéreo 192, Neiva.
170) **R. Santa Barbara**, Aéreo 3854, Santa Barbara – 171) **R. Luz**, Aéreo 284, Manizales – 172) **R. Pipatón**, Barrancabermeja – 173) **Emis. Variedades**, Aéreo 403, Barranquilla – 174) **La Voz Gran Colombia**, Edif. Banco Comercio, Cucuta.
175) **R. Ipiales**, Cl. 7 No. 537, Ipiales – 176) **Emis. Mariana**, Cr. 7 No. 610, Bogotá. **Te:** 462712 – 177) **Voz Cereté**, Cerete – 178) **Ondas Orteguaza**, Florencia – 179) **R. Guadalajara**, Cr. 13 No. 584, Buga.
180) **Ondas del Guali**, Ave. Centenario. Honda. **Te:** 1440. **L.P:** Mgr: L. Eduárdo T – 181) **La Voz Calarca**, Aéreo 725, Calarca – 182) **R. Bahia**, Aéreo 1771, Cartagena. **Te:** 13405. **L.P:** Mgr: E. Emiliani R – 183) **R. Magdalena**, Aéreo 1240, Santa Marta. **Te:** 3300. **L.P:** Mgr: R. Moráles – 184) **R. Pamplona**, Aéreo 1055, Pamplona.
185) **R. Belalcazar**, Cr. 5 No. 581, Popayán – 186) **Voz Honda**, Honda.
187) **Ondas de Riohacha**, Aéreo 3, Riohacha – 188) **R. Tuluá**, Aéreo 130, Tuluá – 189) **Ondas de Ibaqué**, Edif. Raad, Ibaqué. **L.P:** Mgr: L. E. Martinez R.
190) **R. Sogamoso**, Cr. 11 No. 1005, Sogamoso – 191) **R. Sinfonia**, Medellin – 192) **R. Sintonia**, Villamaria Cds – 193) **Voz Carare**, Velez – 194) **R. Sincelejo**, Sincelejo.
195) **La Voz de Pamplona**, Cl. 5 No. 693, Pamplona – 196) **R. Fundación**, Fundación – 197) **Nueva Continente**, Cr. 7 No. 1327, Bogotá.
198) **Voz Amistad**, Pasto – 199) **R. Armonia**, Medellin.
200) **La Voz Paraiso**, Cl. 6 No. 1049, Cerrito V – 201) **R. Centinela**, Aéreo 221, Pereira – 202) **R. Palonegro**, Aéreo 322, Bucaramanga.
203) **La Voz Monteria**, Monteria – 204) **Ondas Femeninas**, Cl. 45A No. 971, Bogotá.
205) **R. Garzón**, Cl. 7 Cr. 7, Garzón – 206) **R. Boyaca**, Tunja – 207) **R. Calima**, Calima V – 208) **R. Sumapaz**, Cr. 7 No. 529, Fusagasugá. **Te:** 2000 – 209) **La Voz Katia**, Medellin.
210) **La Voz Panamericana**, Cl. 33 No. 1617, Bucaramanga – 211) **R. Estrella**, Aéreo 617, Armenia – 212) **R. Progreso de Cordoba**, Aéreo 4864, Lorica. **L.P:** Mgr: S. C. Hnos – 213) **La Voz de Chapinero**, Aéreo 11279, Bogotá. **Te:** 481359. **L.P:** Mgr: H. Florez – 214) **R. Minute**, Barranquilla.
215) **R. Popayán**, Cr. 12 No 427, Popayán. **Te:** 2409. **L.P:** Mgr: M. González M – 216) **Liceo Departamental**, Sonson – 217) **R. Sevilla**, Cr. 50 No. 4211, Sevilla V – 218) **R. Armero**, Cl. 11 Cr. 15, Armero.
219) **R. Canoa**, **Turbaco**.
220) **Emis. Mariana**, Aéreo 159, Manizales – 221) **R. Magangué**, Aéreo 554, Magangué. **L.P:** Mgr: J. Raad – 222) **Ecos Quilichao**, Sder, Quilichao – 223) **R. Fantasia**, Cr. 10 No. 2621, Bogotá. **Te:** 429435 – 224) **R. Parroquia**, Nemocón.
225) **R. Espacial**, Tulua – 226) **R. Copacabana**, Cr. 30 No. 2963, Medellin – 227) **Voz Amiga**, Cr. 23 No. 3049, Manizales – 228) **La Voz Cordialidad**, Galapa – 229) **Voz Zipaquira**, Zipaquira.
230) **La Voz del Banco**, Aéreo 89, El Banco – 231) **La Voz Musica**, Medellin – 232) **R. Zarzal**, Zarzal – 233) **R. Ciudad Milagro**, Armenia.

ECUADOR

L.T: GMT–5 h – **Pr.L:** Spanish, Quechua.
INSPECCION DE RADIO, Ministerio de Publicas, Direccion Tecnica – **ADDR:** Benalcazar 698, Quito. **Te:** 11019. **Cable:** Radionacional – **L.P:** Dir. Gen: G. de la Torre.

ASOCIACION ECUATORIANA DE RADIODIFUSORAS

ADDR: Apt. 289, Quito. **Te:** 10669. **Cable:** AER.

STATIONS: Short Wave: Call: HC—. * inactive.

	Call	kc	m	kW	Name and h of tr.
1)	WN1	2450	122.5	0.35	La Voz del Triunfo, Sto. Domingo Cds: 23.00–03.00
2)	RT6	2460	121.9	0.45	R. Paz y Bien, Ambato: 10.30–19.00, 22.00–03.00
3)	VA4	2470	121.5	2	La Estación de la Alegría, Esmeraldas: 12.00–04.00
4)	GB4	2480	121.0	0.35	R. Nac. Espejo, Esmeraldas:12.00–04.00
5)	HW2	2490	120.5	0.45	R. Rey, Quevedo: 14.00–19.00, 21.00–04.00
6)	LP3	3215	93.30	0.25	La Voz de el Oro, Pasaje: 13.00–19.00, 23.00–04.00
7)	RE1	3220	93.15	1.5	R. Nac. Espejo, Sto. Domingo Cds: 23.00–03.00
8)	JC1	3240	92.59	0.2	R. Atuntaqui: 16.00–03.30
9)	MZ6	3265	91.87	0.2	Voz del Rio Chimbo: 11.00–04.00
10)	VU2	3275	91.60	0.2	La Voz de Urdaneta, Ricaurte: 10.00–07.00
11)	HA2	3308	90.70	1.5	Ondas Quevedañas, Quevedo: 23.00–03.00
12)	JT1	3340	89.81	0.3	R. Tulcán: 12.30–17.00, 22.30–04.00
13)	DR4	3355	89.42	0.2	R. Miramar, Bahia: 11.00–04.00
14)	DY4	3372	88.96	0.25	R. Iris, Esmeraldas: 11.00–05.00
15)	OT1	3390	88.50	0.2	R. Zaracay, Sto. Domingo Cds: 10.00–03.00
16)	KD5	3515	85.35	0.2	R. Centro de Gualaceo: 11.30–03.30
17)	YC4	3520	85.23	0.2	R. Escuelas Radiales, Lita: 11.00–04.00
18)	GS6	3615	86.00	0.4	R. Pillaro: 11.30–19.00, 21.00–03.30
19)	IE1	3695	80.95	0.5	R. Cotacachi: 11.00–03.00
20)	BH6	3755	79.90	0.4	R. Latacunga: 11.00–19.00, 22.00–04.00
21)	PZ1	3950	75.95	0.3	R. Rumichaca, Tulcán: 11.45–14.30, 16.00–04.00
22)	JH1	3965	75.67	0.3	R. Turismo, Otavalo: 12.00–14.00, 17.00–19.00, 23.00–03.00

Ecuador

	Call	kc	m	kW	Name and h of tr.
23)	SN6	3975	75.47	0.6	R. Sira, Ambato: 11.00–23.30, 01.00–04.00
24)	ER6	3985	75.28	1	Escuelas Radiofonicas Populares, Riobamba: 10.00–14.00, 16.30–02.00
25)	JA5	3995	75.19	0.5	La Voz del Rio Tarqui, Cuenca: 10.00–05.00
26)	AK2	4705	63.76	1	R. Dif. del Ecuador, Guayaquil: 10.45–05.00
27)	BK2	4750	63.16	0.25	R. El Mundo, Guayaquil: 13.00–19.30, 21.45–04.00
28)	LJ6	4755	63.10	0.2	La Voz de Bolívar, Guaranda: 19.00–22.00, 23.00–04.00
29)	MX4	4770	62.89	0.4	R. Cenit, Portoviejo: 11.00–13.00, 15.00–04.55
30)	EH3	4775	62.84	0.2	R. El Progreso, Loja: 11.00–15.00, 17.00–20.00, 00.00–03.00
31)	MQ1	4780	62.76	1	R. Atahualpa, Quito: 10.45–04.35
32)	AU2	4790	62.63	0.25	R. Atalaya, Guayaquil: 11.00–05.00
33)	SV5	4800	62.50	0.25	R. Amazonas, Cuenca: 11.00–20.00, 23.00–04.00
34)	FA4	4810	62.37	0.3	La Voz de Manabi, Portoviejo: 11.00–05.00
35)	JS1	4830	62.10	0.5	Ondas del Angel, El Angel: 15.30–19.00, 22.00–03.00
36)	AP4	4835	62.05		La Voz del Valle, Portoviejo: 11.00–13.00, 16.00–04.00
37)	RM3	4845	61.92	0.38	R. Cultura Machala: 11.00–19.00, 00.00–05.00
38)	CV3	4850	61.86	0.25	Ondas del Zamora, Loja: 23.00–03.00
39)	MA1	4855	61.79	0.35	R. Marañon, Quito: 12.00–03.00
40)	CD1	4865	61.66	1	R. Luz de América, Quito: 11.30–04.00
41)	GM7	4870	61.60	0.3	R. Rio Amazonas, Macuma: 11.00–13.00, 23.00–01.00
42)	VE4	4875	61.54	3	La Voz de Esmeraldas: 11.00–13.30, 17.00–19.30, 23.00–05.00
43)	WE1	4880	61.48		R. Nac. Espejo, Quito: 24 h
44)	VS6	4904	61.18	0.42	La Voz de Saquisili: 12.00–17.30, 21.00–03.00
45)	MJ1	4910	61.10	5	Emis. Gran Colombia, Quito: 11.00–06.00
46)	AH3	4916	61.03	0.3	R. El Trebol, Zaruma: 23.00–03.00
47)	MP2	4920	60.98	0.2	La Voz de la Peninsula, La Libertad: 23.00–03.00
48)	JX6	4920	60.98	0.35	R. Cultural Religiosa, Baños: 12.00–03.00
49)	RQ1	4923	60.94	12/6	R. Quito: 11.00–05.00
50)	CR1	4930	60.85	10	R. Casa de la Cultura, Quito: 11.30–13.00, 17.00–19.00, 00.00–03.15
51)	XZ1	4940	60.73	10	R. Nacional del Ecuador; Quito: 11.00–15.00, 16.30–19.30, 22.30–05.00
52)	AV3	4950	60.60	2	R. Ondas Lojanas: 11.00–14.00, 17.00–20.00, 00.00–03.00
53)	PH5	4960	60.48	1	La Voz del Chofer, Riobamba: 12.00–04.00
54)	GH1	4970	60.35	3	R. Tarqui, Quito: 10.45–04.00
55)	JC5	4980	60.24	0.3	Ondas Azuayas, Cuenca: 10.45–05.00
56)	SJ1	4990	60.12	1	R. Xavier, Quito: 11.00–15.00, 16.45–17.30, 22.00–03.00
57)	AS4	5010	59.88	0.5	La Voz de los Caras, Bahia: 11.00–05.00
58)	OB5	5025	59.70	0.2	Ondas Azules, Cuenca: 11.30–04.00
59)	VC3	5035	59.58	0.75	R. Centinela del Sur, Loja: 23.00–03.00
60)	JP1	5050	59.41	1.2	R. Jesus del Gran Poder, Quito: 11.00–14.00, 22.30–03.00
61)	RP1	5055	59.35	0.5	R. Católica, Quito: 10.35–15.00, 17.00–18.00, 22.00–03.00
62)	PS5	5250	57.25	0.5	Ondas Cañaris, Azogues: 11.00–14.00, 15.45–19.00, 21.45–04.00
63)	CV5	5950	50.42	0.3	La Voz de los Cuatro Rios, Cuenca: 11.30–04.00
64)	TR1	5960	50.34	0.75	R. Equinoccial, Ibarra: 11.45–02.00
65)	GE5	5965	50.29	0.5	R. Mundial, Riobamba: 12.00–04.00
66)	EB4	6015	49.88	0.5	R. Manta: 12.00–14.00, 17.00–19.00, 23.00–04.50
68)	JB	6025	49.79	50	La Voz de los Andes, Quito
67)	NK3	6035	49.71	0.5	R. Cariamanga: 11.00–15.00, 17.00–19.00, 23.00–04.00
68)	JB	6050	49.50	30/50	La Voz de los Andes, Quito
69)	AC1	6060	49.50	0.75	La Voz de la Democracia, Quito: 11.30–04.30
70)	IW5	6070	49.42	0.5	R. El Mercurio, Cuenca: 11.00–05.00
71)	DG2	6080	49.34		R. Bolivar, Guayaquil: 12.00–05.00
72)	SP4	6100	49.18	1	La Voz del Volante, Portoviejo: 11.00–05.00
73)	PJ2	6170	48.62	0.25	R. Fluminense, Ricaurte: 23.00–03.00
68)	JB	6185	48.50	30	La Voz de los Andes, Quito
74)	EH6	6195	48.43	1.5	R. Cosmopolita, Ambato: 12.00–03.30
68)	JB	9645	31.10	30	La Voz de los Andes, Quito
68)	JB	9745	30.78	1/30	La Voz de los Andes, Quito
68)	JB	11770	25.49	30	La Voz de los Andes, Quito
68)	JB	11910	25.19	30	La Voz de los Andes, Quito
68)	JB	11915	25.18	30	La Voz de los Andes, Quito
68)	JB	15115	19.85	1/30	La Voz de los Andes, Quito
68)	JB	15325	19.58	30	La Voz de los Andes, Quito
68)	JB	17880	16.78	30	La Voz de los Andes, Quito
68)	JB	17890	16.77	30	La Voz de los Andes, Quito

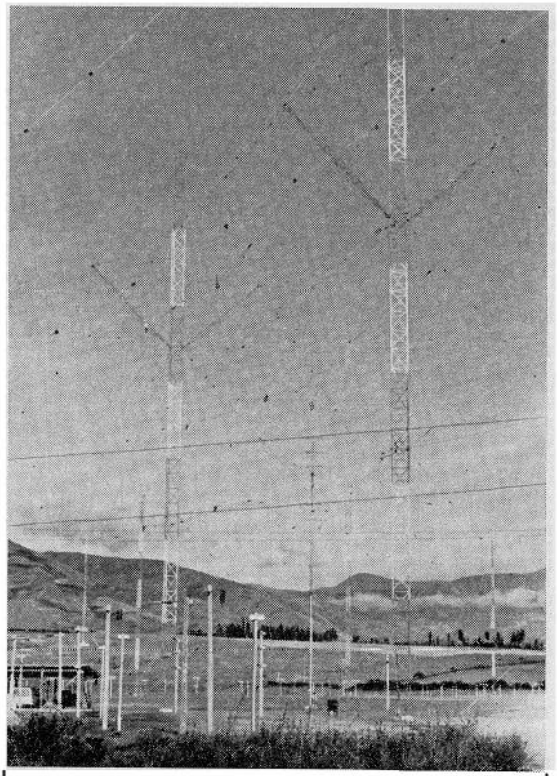
Medium Wave: Call: HC—. °=Short Wave

	Call	kc	kW		Call	kc	kW		Call	kc	kW
75)	FA2	540	0.7	15)	OT1	°965	0.2	159)	EM1	1255	0.2
76)	DG1	550	5	114)	MB1	970	0.35	55)	JE5	°1265	0.25
77)	RM2	560	10	115)	AW2	975	20	160)	UM2	1270	0.25
78)	RM1	570	1	116)	JI5	980	0.5	69)	AB1	°1280	0.35
79)	SP1	595	0.2	54)	GH1	°990	3	161)	VN4	1285	1
80)	RL6	600	0.5	117)	EW2	995	5	25)	JA5	°1290	0.5
81)	RF3	625	0.3	118)	RO6	1000	0.2	162)	MS1	1295	0.3
51)	XY1	°640	10	119)	RV5	1005	1.5	163)	VM6	1295	0.2
82)	FM2	665	0.45	120)	RC4	1010	0.7	164)	DC2	1300	1
56)	SJ1	°670	1	121)	RS6	1015	0.75	43)	GB1	°1310	0.4
32)	AU2	°675	10	122)	LV1	1020	0.6	165)	JD6	1320	0.4
83)	WC1	680	0.2	123)	TO5	1027	0.25	166)	FR2	1325	0.2
84)	RS2	695	1.75	124)	RR2	1030	1	167)	PX1	1335	0.3
68)	JB1	°700	30	125)	CW1	1040	0.7	168)	OF4	1340	2
36)	AM4	°715	1	26)	AJ2	°1050	5	2)	PB6	°1345	3
85)	IC1	720	0.4	126)	AC6	1060	0.7	169)	PV2	1350	0.3
86)	MB2	730	10	127)	RV3	1065	1.5	170)	HA2	1370	0.25
87)	SE4	735	0.25	128)	VP1	1070	0.5	171)	JR6	1375	1
88)	BG1	740	1.5	129)	GB6	1075	0.5	172)	JN1	1385	0.5
89)	CT2	750	0.5	130)	FD2	1080	5	63)	CV5	°1390	0.3
49)	RQ1	°760	12/6	131)	MG1	1090	0.35	42)	VE4	°1395	
90)	MF2	770	1	132)	ED5	1090	0.25	173)	FL2	1400	0.2
91)	RG4	780	0.3	133)	RR6	1095	0.4	174)	BS4	1400	0.3
92)	AA1	785	0.2	134)	EM4	1100	0.3	45)	MJ1	°1410	5
93)	PT5	790	1	135)	RR5	1100	1.5	175)	CV6	1420	0.3
71)	DE2	°800	10	136)	RP6	1105	0.5	50)	BX1	°1430	1
94)	FV1	805	1	137)	EG1	1111	0.5	176)	OV5	1440	2
95)	VT2	810	0.2	138)	LA2	1115	0.2	177)	DF1	1440	0.6
7)	EE1	°825	1.5	41)	GM7	°1120	0.3	53)	SC5	°1445	0.2
40)	CD1	°835	1	139)	AO5	1120	0.25	178)	AQ2	1450	0.25
96)	ET6	845	0.8	140)	PV6	1125	0.3	179)	GM1	1460	0.25
97)	AJ2	850	1	141)	RT1	1130	0.3	180)	ET4	1465	0.2
60)	FF1	°860	1.2	142)	FB2	1140	0.25	181)	EC1	1470	0.36
98)	OA7	865	0.4	143)	RG1	1145	1.2	182)	EJ3	1475	0.22
99)	NY2	870	5	144)	CZ5	1150	0.3	31)	MQ1	°1490	1
61)	RP1	°880	0.5	145)	VR3	1160	2	183)	HG2	1495	0.5
100)	LG3	885	0.2	146)	UE6	1165	0.5	184)	WN5	1496	0.4
101)	TL5	890	0.5	147)	VJ5	1170	0.25	185)	RO1	1500	0.2
102)	GC2	895	0.3	148)	LR1	1180	0.5	186)	PC2	1510	0.5
103)	RJ1	900	1.2	149)	BE2	1190	0.3	187)	VR1	1520	1.2
58)	EV5	°900	3	150)	CS1	1195	0.5	62)	OC5	°1530	0.21
65)	GR5	°910	0.2	70)	RM5	°1200	2	188)	MH6	°1535	0.5
104)	RU3	914	0.2	151)	RQ2	1205	0.3	189)	OS4	1540	0.25
105)	CM1	920	0.5	152)	GU1	1210	0.4	190)	DJ1	1545	0.3
106)	VL2	925	0.3	153)	SF5	1215	0.2	74)	EJ6	°1550	0.5
107)	IM1	930	0.3	27)	BJ2	°1220	0.25	191)	TR3	1555	0.5
108)	UE5	935	0.5	23)	JM6	°1225	0.6	192)	CS2	1560	0.35
109)	MT1	940	0.5	154)	RI1	1230	0.22	39)	AP1	°1570	0.35
110)	DE2	945	1	155)	MV5	1235	0.2	193)	AI6	1580	0.3
111)	JM1	950	0.5	156)	LA5	1240	0.5	194)	VS1	1590	0.2
112)	MC2	955	0.25	157)	FA1	1245	0.35	195)	FM2	1600	0.3
113)	NC1	960	0.4	158)	RB2	1250	1				

Short Waves:

1) Sto. Domingo de los Colorados. **L.P:** Dir: M. M. Yanetz.
2) Cas. 94, Ambato. **Te:** 2120. **L.P:** Dir. Gen: P. H. Cerasuolo S. Dir. Tec: X. Alvarez. **D.Prgr: N:** 15.00–03.00. **Ann:** "Radio Paz y Bien, la Voz Católica del Tungurahua". **V.** by letter. Recordings accepted. **F.Pl:** 5kW (mw) 1kW (sw) – 3) Ca. Bolivar 831, Esmeraldas. **L.P:** Dir. Gen: J. C. Plaza L. V. by letter.
4) Bolivar 831, Esmeraldas. **Te:** 1056. **L.P:** Dir: H. V. Lippke. **D.Prgr: N:** 17.30, 00.30. **Ann:** "R. Nacional Espejo, la primera y mas potente emisora del país". V. by QSL-card.
5) Ricaurte 271, Quevedo. **L.P:** Dir: E. Muñoz – 6) 10 de Agosto 633, Pasaje. **L.P:** Dir: L. Peralta P.
7) Plaza Central, Sto. Domingo de los Colorados. **Te:** 13477. **L.P:** G. V. Lippke. Dir. Tec: L. Rivera. **D.Prgr: N:** 12.30. **Ann:** "Estaciones de la R.N.E. eslabon de la Gran Cadena Radial, Amarillo, Azul y Rojo del Ecuador, R. Nac. Espejo de Sto. Domingo de los Colorados". **V.** by letter.
8) Atuntaqui. **L.P:** Dir: J. Cadena – 9) Colegio 3 de Marzo, San José

de Chimbo. **L.P:** M. Zanipatin – 10) Ricaurte. **L.P:** Dir: C. Casal M. 11) 7 de Octubre 640, Quevedo. **Te:** 330. **L.P:** Dir. Gen: H. Alvarado P. Dir: D. Espinel de Alvarado. Dir. Tec: G. Bonilla y F. Simons. Dir. Prgr: R. Rey. **Ann:** "Esta es Ondas Quevedañas, La Principal emisora del Litoral Ecuatoriano, transmite desde la ciudad de Quevedo, Principal centro bananero del Ecuador, en Sudamérica, 1370kc onda larga,3308kc onda corta banda de los 90 metros". V. by QSL-card. Recordings acc.
12) Ayacucho 378, Tulcán. **L.P:** Dir: J. Betancourt – 13) Bahia. **L.P:** Dir: W. Delgado – 14) Cas. 142, Esmeraldas. **L.P:** Dir: D. Alvarez T. 15) Edif. Hualpa Alvarez, St. Domingo de los Colorados. **L.P:** Dir: H. Velastegui – 16) Parque 10 de Agosto, Gualaceo. **L.P:** Dir: H. Rodriguez – 17) Campamento Lita.
18) Urbina y Sucre, Pillaro. **L.P:** Dir: G. Salazar – 19) 10 de Agosto s/n, Cotacachi. **L.P:** Dir: L. A. Paz – 20) Terminal de la Ca. Hnas, Pasmiño. **L.P:** Dir: B. Muños.
21) Cas. 42, Tulcán. **L.P:** Dir: E. Cabezas. Dir. Tec: A. Guerron. **D.Prgr:** N: 12.30, 17.30, 23.00, 02.15. **Ann:** "Escuchan R. Rumichacha desde Tulcán, Ecuador Cultural, Musical y Deportiva". V. by letter & QSL-card. Recordings accepted.
22) 31 de Octubre s/n, Otavolo. **L.P:** Dir: J. Vivar – 23) Mera 315, Ambato. **L.P:** Dir: J. Mancero – 24) Apt. 36, Riobamba. **Te:** 2625. **L.P:** Dir: R. Veloz. Dir. Tec: M. Duchatelet. V. by QSL-card. Recordings accepted. – 25) Lamar y Montalvo, Cuenca. **L.P:** Dir: M. Pulla C.
26) P.O. Box 4144, Guayaquil. **Cable:** CRE. **L.P:** Dir. Gen: R. Guerrero V. Dir. Tec: J. Magen. **D.Prgr:** N: every h on the h. **Ann:** "Transmiten HC2AJ 1050kc onda larga y HC2AK 4765 onda corta, 91.5Mc FM estaciones de C.R.E. desde sus estudios en Guayaquil, Ecuador". V. by letter. Recordings accepted.
27) 9 de Octubre 308, Guayaquil. **L.P:** Dir: G. Vergera J – 28) Garcia Moreno 28, Guaranda. **L.P:** Dir: J. Alarcon – 29) P.O. Box 4065, Sucre, Portoviejo. **L.P:** Dir: W. Delgado.
30) Barrio del Carretero Nte, Loja. **L.P:** Dir: E. Herrera G.
31) Apt. 3213, Quito. **Te:** 12385. **Cable:** Rahualpa. **L.P:** Dir. Gen: G. Maldonado. Dir. Tec: L. Calderon. Dir. Foreign Rel: Miss L. Rivadeneira. **D.Prgr:** mw: 10.45–04.35. N: 11.00, 18.00, 19.00, 23.00, 01.00, 03.00 and every 30 min's from 11.00–04.30 (on all st's). **Ann:** "Les habla R. Atahualpa, emisora matriz del Circuito HCMQ, transmite en 1490kc, canal perferencial y 4780kc, canal nacional, desde Quito, capital del Ecuador". V. by letter.
32) Rumichaca 928, Guayaquil. **L.P:** Dir: V. Paladines – 33) Gabriel Ullauri 360, Cuenca. **L.P:** Dir: A. Vega – 34) Sucre 640, Portoviejo. **L.P:** Dir: C. Chavez C – 35) S. José de Chabayán s/n, El Angel. **L.P:** J. Salazar – 36) Cordova ent. Ricaurte y Chile, Portoviejo.
37) 9 de Mayo, Machala – 38) 24 de Mayo, Loja. **L.P:** Dir: C. Valarezo – 39) Venezuela 872, Quito. **L.P:** Dir: A. Placencia.
40) Apt. 3190, Quito. **Te:** 16717. **L.P:** Dir: M. Sarmiento. Dir. Tec: M. Castro. **D.Prgr:** N: 02.00. **Ann:** "R. Dif. Luz de América, desde Quito, Ecuador, pais Amazónico 835kc banda local, 4867kc banda internacional de los 60 metros, 100Mc FM". V. by letter.
41) Macuma. **L.P:** Dir: G. Molina.
42) Apt. 1660, Esmeraldas. **Te:** 1106. **L.P:** Dir. Gen: H. A. Endara E. Dir. Tec: Ing. Horvath. **D.Prgr:** N: 11.30, 17.30, 23.30, 03.00. **Ann:** "La Voz de Esmeraldas, La Voz del Pueblo, una emisora para la gente moderna y de buen gusto como Vd". V. by letter. Recordings accepted.
43) Esmeraldas 865, Quito. **Ann:** "R. Nacional Espejo la primera y mas potente emisora del pais". V. by QSL-card – 44) Borrero 7, Saquisili. **L.P:** Dir: A. Corrales.
45) Cas. 2246, Quito. **Te:** 11670. **Cable:** Emigrancolombia. **L.P:** Dir. Gen: E. Cevallos. Dir. Tec: F. Simon. **D.Prgr:** N: 11.10, 13.00, 23.00. **Ann:** "Emisoras Gran Colombia, Voz de Ecuador es la emisora mas popular". V. by letter. Recordings accepted. **F.Pl:** 10kW+TV st.
46) Club Deportivo Trebol, 26 de Noviembre, Zaruma – 47) La Libertad. **L.P:** Dir: M. Pinargote – 48) Baños. **L.P:** Dir: R. Piñaherrera.
49) Apt. 57, Quito. **Te:** 10151. **L.P:** Dir. Gen: C. Mantilla. Dir. Tec: A. Horvath. Dir. Prgr: E. Brito. **D.Prgr:** mw: 11.00–05.00. N: 12.00, 13.15 and every h on the h from 17.00. **Ann:** "R. Quito, La Voz de la Capital, 760kc onda larga, 4923kc banda de 60 m ondas cortas, desde Quito, Ecuador en la mitad del mundo". V. by QSL-card & pennant. Recordings accepted.
50) Apt. 67, Quito. **Te:** 31123. **L.P:** Pres: Dr. B. Carrion. **D.Prgr:** N: 11.45, 03.00. **Ann:** "Esta es R. Difusora de la Casa de la Cultura Ecuatoriana, que transmite desde sus estudios en la ciudad de Quito". V. by letter. Re. in Sp. **Pub:** Prgr. schedule on request.
51) P.O. Box 1316, Quito. **Te:** 16998. **L.P:** Pres. & Dir. Gen: Dr. H. Donose V. Dir. Tec: F. Mejia C. Dir. Prgr: A. Carrera P. **D.Prgr:** mw: 11.00–19.30, 23.00–05.00. N: 11.30, 01.00, 03.30. **For Tourists:** 04.00. **Ann:** "En transmisión Radiodif. Nacional del Ecuador, Voz oficial del estado Ecuatoriano 640kc onda nacional, 4940kc onda internacional, desde Quito, Ecuador, en la mitad del mundo". **Int-Sig:** Vibraphone. V. by letter. Recordings accepted. **F.Pl:** 100kW (Quito).
52) Loja. **L.P:** Dir: J. Armijos V – 53) Tarqui 58, Riobamba.
54) Cas. 2558, Quito. **Te:** 11540. **Cable:** Ratar. **L.P:** Dir: G. Herdoiza. V. by letter.
55) Cas. 4980, Cuenca. **Te:** 3911. **L.P:** Dir: A. Cardozo. Dir. Tec: O.



HCJB's New 16 Meter Antenna Beamed to the south.

RADIO PROGRAMS AROUND THE CLOCK AND AROUND THE WORLD IN 11 LANGUAGES

English, French, German, Japanese, Norwegian, Polish, Portuguese, Quechua, Russian, Spanish, Swedish.

118 COUNTRIES HEARD FROM LAST YEAR

TELEVISION PROGRAMS DAILY IN SPANISH

HCJB "The Voice of the Andes"

HCJB-TV "The Window of the Andes"

QUITO - ECUADOR

Espinoza. **D.Prgr: N:** 11.00, 13.30. **Ann:** "Ondas Azuayas, las estaciones de radio muy moderna y potente del sur del país y la primera en el sur Ecuatoriano". **V.** by letter. Recordings accepted.
56) Benalcazar 478, Quito. **L.P:** Dir: J. Urarte – 57) Malecón 904, Bahia. **L.P:** Dir: A. E. Nevares – 58) I. Ordoñez y Galo de las Peñas, Cuenca. **L.P:** Dir: R. E. Valencia – 59) Correos 196, Loja. **Te:** 211. **L.P:** Dir: F. Coronel – 60) Convento de S. Francisco, Quito. **L.P:** Dir: F. Fernandez.
61) Ca. Imbabura 1149, Quito. **Te:** 10208. **L.P:** Dir: Dr. M. A. Rojas. Dir. Tec: L. Calderon. **V.** by letter – 62) 3 de Noviembre y Rivera, Azoguez. **L.P:** St. Mgr: C. H. Vicuña. Dir. Tec: La Vazquez. **D.Prgr: N:** 11.30, 02.00, 03.00. **Ann:** "Ondas Cañaris en sus dos frecuencias". **V.** by letter. Recordings accepted – 63) Gran Colombia 378, Cuenca. **L.P:** Dir: D. Pinos – 64) Velasco 333, Ibarra. **L.P:** Dir: M. de Teran.
65) Apt. 1244, Riobamba. **Te:** 2101. **L.P:** Dir. Gen: G. Encalada R. Dir. Tec: G. Encalada G. Dir. Foreign Rel: P. Narvaez M. **D.Prgr: N:** 12.00, 17.00, 03.00. **Ann:** "Esta es R. Mundial de Riobamba, Ecuador, Sud-America, transmitimos en 910kc onda larga y 5985kc onda corta, banda de 49 metros, cubrimos con estas ondas todo el Territorio Nacional, R. Mundial, la mejor emisora de Riobamba". **V.** by QSL-card. Re. in Sp, E. Recordings accepted.
66) Apt. 4869, Manta. **L.P:** Dir: E. Bowen. **D.Prgr: N:** 12.30, 17.00, 23.00. **Ann:** "Transmite R. Manta, con sus estaciones... la mas antigua y potente emisora del puerto, desde Manta, Ciudad de turismo y primer puerto maritimo en la Provincia de Manabi". **V.** by QSL-card or letter – 67) Cariamanga. **L.P:** Dir: L. Cabezas J.

68) LA VOZ DE LOS ANDES (HCJB)

ADDR: Casilla 691, Quito. **Cable:** Vozandes (USA Office: Voice of the Andes, Box 691, Miami, Florida 33147) – **L.P:** Pres: A. Van Der Puy; Assoc. Radio Dir: N. Woolnough; Dir. Sp. Sce: D. S. Clark; Dir. Eng. Sce: L. Booker; Eng'g. Dir: F. Woodburn.
HOME SCE. in Spanish: D 11.00–04.00.
11.00–14.00 on 700/6050/9745/11915/15115kc; 14.00–00.30 on 700/6050/9745kc; 00.30–02.00 on 700/6050/9745/11915/15115kc; 02.00–04.00 on 700/6050kc – **N:** Mon–Fri 11.02, 11.30, 12.30, 13.30, 14.30, 15.30, 16.30, 17.45, 19.30, 21.30, 22.30, 23.30, 00.30, 01.30, 02.30, 03.55. Sat 11.02, 11.30, 13.30, 15.30, 16.30, 17.45, 19.30, 20.30, 21.30, 22.30, 23.30, 01.30, 02.30, 03.55. Sun 11.02, 11.30, 13.30, 17.50, 01.30.

INTERNATIONAL SERVICE

TO EUROPE	Nov 66/ April 67 kc
Russian 05.00–05.30	6025, 9645, 11910
Scandinavian 05.30–06.00	
German 06.00–06.30	
Spanish 06.30–07.00	
Scandinavian 09.30–10.00(Sun)	6050, 9745, 11915
Scandinavian 18.00–18.30	15325, 17880
English *18.45–20.00(a)	
German 20.00–20.30	11770, 15115***
Scandinavian 20.30–21.00	
English 21.00–21.30(a)	
Spanish 21.30–22.00	
English 23.30–24.00(c)	15115
Russian 04.30–05.00	6025, 9645, 11910
TO SOUTH PACIFIC	
English 07.00–10.00(b)	6050, 9745, 11915
Russian 10.30–11.00	9745, 11915
TO SOUTH AFRICA AND MADAGASCAR	
French **18.30–18.45	15325, 17880
TO JAPAN	
Japanese 10.00–10.30	9745, 11915

TO CARIBBEAN	kc
French 10.00–10.30	6050
English 18.45–20.00	15325, 17880
English 23.30–24.00(c)	15115, 17890
TO SOUTH AMERICA	
Quechua 10.30–11.00	6050
TO THE AMERICAS	
Spanish 11.00–14.00	6050, 9745, 15115, 17890
14.00–00.30	6050, 9745
English 14.00–15.00(d)(D)	15115, 17890
15.00–16.00(d)(Sun)	
15.00–15.30(d)(Mon)	
15.00–16.30(d)(Sat)	
Russian 16.00–17.00(Sun)	15115, 17890
Russian 22.30–23.00	15115, 17890
English 23.30–24.00(c)	17890
Spanish 00.30–02.00	9745, 11915, 15115
Spanish 02.00–04.00	6050
English 02.00–04.30(e)	9745, 11915, 15115
TO BRAZIL	
Japanese 22.00–22.30	15115, 17890
German 23.00–23.30	
Portuguese 24.00–00.30	

*=D exc. Mon. **=exc. Sun/Mon. ***=March/April on 15115 (or 15325)/17880kc – (a) "Quito Calling" – (b) "Southern Cross Salute" – (c) "Caribbean Call" – (d) "Morning in the Mountains" – (e) "Ecuadorian Echoes".
NEWS: English: 14.02, 23.32; **Swedish:** Thurs 18.02, 20.32, Fri 05.32; **Japanese:** 22.02. **Spanish:** see Home Sce.
DX – Party Line: 1st & 3rd Mon of the month at 21.00 (to Europe) & 02.30 (to the Americas), 1st & 3rd Wed of the month 09.30 (to Australia/New Zealand) – **Mbg.** (English): Wed 03.30, Thurs 09.30 (to Australia/New Zealand – **Time Sig:** Automatically on h and half h. Three short tones followed by a long tone at the exact minute.
ANN: E: "This is radio station HCJB located near the line of the equator with studios in the capital city of Quito in the republic of Ecuador. We are serving our internat. audience on the 19, 25 and 31 m.b. The time in Quito is... the same as... GMT. This is R. st. HCJB, Quito, Ecuador, So. America" – **V.** listeners reports are wanted, these are studied by our engineers. If requested they are answered by QSL-card, in other by letter – **PUB:** Int. prgr.sched. free on request. "Call of the Andes" magazine free to those requesting it from: HCJB, Box 691, Miami, Fla. 33147, USA. Sched. of Spanish prgr's on request from Casilla 691, Quito.
Operated by the missionary org: The World Radio Missionary Fellowship Inc. No comm. adv. Public sce. and ann. of cultural activities accepted free of charge – **FI:** Supported by voluntary gifts from evangelical Christian groups and "share-the-cost" plan.

69) Apt. 288, Quito. **L.P:** Dir: E. Cevallos – 70) Padre Aguirre 757, Cuenca. **L.P:** Dir: M. Merchan – 71) KM13 via Daule, Guayaquil.
72) Morales 543 y Colón, Portoviejo.
73) Ricaurte. **L.P:** Dir. Gen: J. Pazos S. Mgr: W. Jácome C. Dir. Tec: A. Buhbano, G. Bravo N. **D.Prgr: N:** 11.30, 17.30, 20.00, 23.00, 04.00. **V.** by letter. Re. in Sp. Recordings accepted.
74) Bolivar 1807, Ambato. **V.** by letter.

Medium Waves:
75) **Ecuatoriana de Guayaquil**, Via Daule, Guayaquil: 11.00–06.00.
76) **R. Ecuatoriana**, Av. Colón, Edif. Villagomez Yepez, Quito: 10.45–05.00.
77) **R. Mambo**, Guayaquil: 11.00–05.00 – 78) **R. Musical**, Av. Colón 1310, Quito: 24 h – 79) **R. Ritmo**, Flores 846, Quito: 11.00–05.00.
80) **R. Libertador**, Borrero 7, Saquisili: 12.00–18.00 – 81) **R. Fenix**, P.O. Box 23, Zaruma: 12.00–14.30, 17.00–19.00, 23.30–03.30.
82) **R. Ventanas**, Ventañas: 23.00–03.00 – 83) **R. Cristóbal Colón**, Pinampiro: 12.00–16.00, 00.00–03.00 – 84) **R. Sucre**, Via Daule, Guayaquil: 12.00–04.00 – 85) **R. Municipal**, Garcia Moreno y Espejo, Quito: 17.00–19.00, 21.00–04.00 – 86) **R. Guayaquil**, Via Daule, Guayaquil: 12.00–04.00 – 87) **R. Libertad**, Atahualpa 222, Chone: 24h.
88) **R. Sport**, Esmeraldas 865, Quito: 11.00–06.00 – 89) **R. Centenario**, 1 de Mayo 104, Guayaquil: 11.00–03.00 – 90) **R. La Prensa**, Boyaca y 9 de Octubre, Guayaquil: 11.00–03.00 – 91) **R. Umina**, Carchi ent. G. Moreno y Espejo, Manta: 10.30–04.00 – 92) **R. Noticia**, Oriente 337, Quito: 17.00–20.00, 00.00–04.00 – 93) **La Voz del Perpetuo Socorro**, Apt. 63, Cuenca: 12.00–04.00 – 94) **R. Canal Tropical**, Av. Colón 1310, Quito: 11.00–04.00.
95) **R. Atalaya**, El Milagro: 23.00–03.00 – 96) **R. Tricolor**, Edif. Cronica, Ambato: 10.45–03.00 – 97) **La Voz del Santisimo**, J. Pio Montufar 1007, Guayaquil: 11.00–13.30, 23.30–03.00 – 98) **R. 12 de Febrero**, 9 de Octubre, Puyo: 11.00–14.00, 16.00–19.00, 22.00–03.00.
99) **R. Cristal**, Machala 1212, Guayaquil: 24 h.
100) **Ondas Azules**, Sucre ent. Bloy Alfaro, Santa Rosa: 14.00–17.00, 20.00–20.30, 02.00–04.30 – 101) **Ondas Chimborazo**, Pichinga 128, Riobamba: 11.00–05.00 – 102) **La Voz del Rio Guayas**, Boyaca 1319, Guayaquil: 14.00–04.00 – 103) **R. Gemas**, Venezuela 712, Quito: 10.50–05.05 – 104) **Ondas Orenses**, Rocafuerte y Paéz, Machala.
105) **R. Colón**, Quito: 16.00–20.00 – 106) **La Voz Liberal**, Via Daule, Guayaquil: 10.30–06.00 – 107) **La Voz Imbabura**, Palacio Municipal, Ibarra: 12.00–19.00, 20.00–06.00 – 108) **Union Evangélica Misionera**, Caserio Majipamba Colta: 11.00–00.00 – 109) **R. Cronos**, Chile 1336, Quito: 11.00–03.00.
110) **R. Ifesa**, Rumicacha y Culicuchima, Guayaquil: 13.30–04.00.
111) **R. Un Mundo Mejor**, Convento Parroquial, Atuntaqui: 14.00–17.30, 23.00–02.30 – 112) **La Voz de Los Rios**, Barona 709, Babahoyo: 23.00–03.00 – 113) **R. Cosmopolita**, Ambato 902, Quito: 13.00–03.00.
114) **R. Continente**, Oviedo 543, Ibarra: 11.30–20.00, 22.00–04.00.
115) **Ondas del Pacifico**, Clemente Ballen 652, Guayaquil: 11.30–05.00.
116) **R. El Prado**, New York s/n, Riobamba: 11.00–04.30 – 117) **R. Suceso**, P.O. Box 1009, Guayaquil: 12.00–04.00 – 118) **R. Oriental**, Baños: 24 h. – 119) **R. Visión**, 12 de Abril 1891, Cuenca: 11.45–04.00.
120) **R. Cenit**, P. Solano e Imbabura, Manta: 11.00–04.00 – 121) **R. Surcos**, Palacio Espiscopal, Guaranda: 17.00–19.00, 22.00–04.00.
122) **R. Capitol**, Guayaquil y Bolivar, Edif, Rojas, Quito: 11.00–05.00.
123) **La Voz de Pueblo**, Ayacucho 4, Riobamba: 13.00–04.00
124) **R. Rocafuerte**, Via Daule, Guayaquil: 12.00–04.00 – 125) **La Voz de Valle**, Garcia Moreno 534, Machachi: 11.30–17.00, 22.00–03.30.
126) **Ecos del Pueblo**, Plaza Principal, Saquisili: 12.00–19.30, 22.00–03.00 – 127) **R. El Oro**, Juan Montalvo 821, Machala: 12.00–04.00.
128) **R. Libertad**, Salvador 209, Quito: 11.00–03.00 – 129) **R. Nac. Espejo**, Bolivar 1527, Ambato: 11.00–05.00.
130) **R. Noticia**, Cas. 5041, Guayaquil: 12.00–05.00 – 131) **R. Fantasia**,

Venezuela 541, Quito: 11.00–01.00 – 132) **R. Roxi**, 10 de Agosto 21, Riobamba: 11.00–04.00 – 133) **R. Rey**, Quito 20161, Latacunga: 12.00–03.00 – 134) **R. Costa Azul**, Pedro Gual, Portoviejo: 11.00–05.00. 135) **R. Reloj**, Lamar 718, Cuenca: 13.00–04.00 – 136) **R. Pelileo**, Pelileo: 11.30–13.30, 23.30–03.30 – 137) **R. Exito**, Benalcazar 675, Quito: 11.00–05.00 – 138) **R. América**, Luque 910, Guayaquil: 11.00–05.00 – 139) **La Voz de Tomebamba**, Cas. 269, Cuenca: 11.45–04.00. 140) **R. Juan Montalvo**, Ambato: 11.00–05.00 – 141) **R. Tricolor**, Gonzáles Suárez s/n, Mira: 10.30–18.00, 22.00–04.00 – 142) **R. Nac. Condor**, F. García Avilés 613, Guayaquil: 09.00–06.00 – 143) **R. Nuevo Mundo**, Venezuela 1070 y Olmedo, Quito: 10.45–04.00.
144) **La Voz de Riobamba**, Véloz 112, Riobamba: 23.00–03.00.
145) **R. Via**, Machala: 11.00–03.00 – 146) **R. Runatacuyak**, B. Quevedo: 21.00–23.00 – 147) **R. Central**, Roma 26 y Olmedo, Riobamba: 11.00–23.30, 02.00–04.00 – 148) **R. Central**, Recoleta 112 y Maldonado, Quito: 11.00–05.00 – 149) **R. Excelsior**, P. Mancayo 934 y Vélez, Guayaquil: 13.00–04.00.
150) **R. Turismo**, Bolivar 539, Sangolqui: 11.00–18.00, 22.00–03.00.
151) **La Voz del Tropico**, 7 de Octubre 3008, Quevedo: 12.30–04.00.
152) **R. Ecos**, Cas. 1020, Quito: 11.00–05.00 – 153) **R. Colegio San Felipe**, Colgeio S. Felipe, Riobamba: 17.15–19.00 – 154) **Centro Radiofonica de Imbabura**, Maldonado 473, Ibarra: 11.30–03.30.
155) **La Voz del Austro**, Loja 967, Cuenca: 11.00–04.00 – 156) **R. Riobamba**, Véloz 59, Riobamba: 12.00–04.00 – 157) **R. Metropolitana**, Amazonas 538, Quito: 11.00–04.30 – 158) **La Voz del Litoral**, Junin 206, Guayaquil: 11.00–04.00 – 159) **Ondas Charchenses**, Cas. 30, Tulcan: 13.00–03.00.
160) **R. Universal**, Bolivia 715, Guayaquil: 24 h – 161) **La Voz del Cacique**, Noboa y Santisteban, Jipijapa: 11.00–04.00 – 162) **R. Mariscal**, Sucre 10 de Agosto s/n, San Isidro: 11.00–19.00, 22.00–04.00.
163) **R. Once de Noviembre**, Quito 20161, Latacunga: 12.00–04.00.
164) **R. Cenit**, Via Daule, Guayaquil: 11.00–04.00 – 165) **R. Continental**, Cas. 368, Ambato: 11.00–03.45 – 166) **R. Guayaquil**, Cas. 47, Babahoyo: 23.00–03.00 – 167) **R. Victoria**, Esmeraldas 865, Quito: 11.00–06.00 – 168) **La Voz de Chone**, Chone: 11.15–04.30.
169) **R. Reloj**, El Barquito Puente 5 de Julio, Guayaquil: 24 h.
170) **La Voz del Rio Quevedo**, 24 de Febrero, Quevedo: 11.00–14.00, 16.00–20.00, 22.00–05.00 – 171) **La Voz del Colegio Mera**, Cuenca y Mera, Ambato: 13.00–03.00 – 172) **R. El Tiempo**, Guayaquil 1242, Quito: 11.00–06.00 – 173) **R. Continental**, Colón 2005, Guayaquil: 12.00–19.00, 22.00–04.00 – 174) **R. Tropical**, 25 de Mayo, Manta: 10.30–04.00 – 175) **La Voz de Salcedo**, Moreno 37, Salcedo: 12.00–14.00, 17.00–19.00, 23.00–03.00 – 176) **Ondas del Volante**, Azuay 317, Azoguez: 11.00–19.00, 22.00–04.00 – 177) **La Voz del Norte**, Oviedo 814, Ibarra: 11.30–17.30, 22.00–04.00 – 178) **R. Nueva Ortiz**, Esmeraldas 1912, Guayaquil: 12.00–04.00 – 179) **R. Reloj**, Esmeraldas 865, Quito: 11.00–06.00.
180) **R. El Triunfo**, Sucre y 9 de Octubre, Esmeraldas: 11.00–05.00.
181) **Ecos del Cayambe**: 10.30–14.00, 16.00–04.00 – 182) **Ecos de Jambeli**, Gonzalo Cordiva 548, Puerto Bolivar: 11.00–04.00.
183) **R. Central**, Vinces: 11.00–21.00, 23.00–05.00 – 184) **R. Puruha**, 10 de Agosto, Riobamba: 12.00–04.00 – 185) **R. Otavalo**, Modesto Jarmillo y Salinas, Otavalo: 13.00–20.00, 23.00–03.00 – 186) **R. El Tiempo**, Blvd. 9 de Octubre, Guayaquil: 24 h – 187) **R. Cordilla**, Apt. 1003, Quito: 11.30–04.00 – 188) **Org. Radiofonica del Cotopaxi**, Edif. Ramos, Latacunga: 12.00–15.00, 16.00–20.00, 22.00–04.30.
189) **La Voz del Carrizal**, F. Alfaro 314, Calceta: 11.00–04.30.
190) **R. Panamericana**, Salinas 835 y Asunción, Quito: 10.30–19.00, 21.30–03.00 – 191) **La Voz del Guabo**, El Guabo: 11.00–13.00, 17.00–19.00, 23.00–05.00 – 192) **Centro Radiofonico Sideral**, Daule: 13.00–05.00 – 193) **R. La Voz de los Llanganates**, Barrio el Censo, Pillaro: 11.00–14.00, 17.30–20.00, 23.30–02.00 – 194) **La Voz de Sangolqui**, Sangolqui: 23.00–03.00 – 195) **R. Consular**, El Empalme: 11.30–15.00, 18.00–22.00, 01.00–03.30.

FALKLAND ISLANDS

L.T: GMT–4 h (April–Sept: –3 h) – **Pr.L:** English.

FALKLAND ISLAND BROADCASTING SERVICE (Gov.)
ADDR: Broadcasting Studios, Stanley. **Cable:** Broadcasts. **Te:** 90. **L.P:** Dir: Ch. T. Reive.
STATIONS: 536kc 559.7m 5kW – 3958kc 75.79m 0.5kW.
HOME SCE: W 22.45(Sat 21.30)–01.00(Sat 02.00), Sun 21.45–01.30. **N:** BBC: W 11.00 (Oct–March), 13.00 (April–Sept), 23.00 (Oct–March), 00.00 (April–Sept). **Local N:** Fri 23.35 – **ANN:** "This is the Falkland Islands Broadc. Station" – **V.** by letter – **FI:** By license payments and Gov. grant.

GUIANA

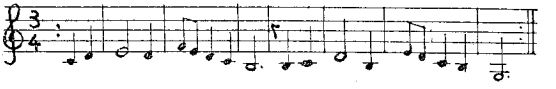
L.T: GMT–3¾ h – **Pr.L:** English.

GUYANA BROADCASTING CO. LTD. (Comm.)
ADDR: Broadc. House. Phillip's Green, High St. Georgetown. **Te:** 2691. **Cable:** Broadcast – **L.P:** Gen. Mgr: E. A. D. Saul. A.M.I.E.R.E. Eng-in-charge: J. Kerr. Sales Mgr: U. A. Gouveia. Dir. Prgr: R. A. Khan.
STATIONS: ZFY (R. Demerara) and G.B.S. (560kc)
560kc 536m 10kW – 3265kc 91.87m 2kW
760kc 395m 10kW – 5980kc 50.17m 2kW
(G.C: 58.05W/06.49N).
G.B.S: 560kc: W 09.45–01.50, Sun 10.45–01.50.
N: W 09.46, 10.45, 11 00*, 13.45, 14.45, 15.45, 18.00*, 18.45, 20.45, 21.45, 22.45, 23.00*, 23.45, 00.45, 01.45. Sun: 10.46, 11.00*, 13.45, 15.45, 22.45, 23.00*, 23.45, 01.45.
ZFY: 760kc: 09.15(Sun 09.45)–02.45(Sat 03.45); 3265kc: 19.45–02.45(Sat 03.45); 5980kc: 09.15(Sun 09.45)–19.45.
N: W 09.48, 10.15, 11.15, 13.00*, 15.10, 16.00*, 20.00*, 20.10, 21.10, 22.00, 23.10, 00.45, 02.43. Sun: 11.10, 16.00*, 16.10, 20.00*, 23.10, 00.45, 02.43. *=BBC.
ANN: On 560kc: "This is G.B.S, Guyana Broadc. Sce". On 760/3265/5980kc: "This is R. Demerara, Voice of Guyana." **V.** by QSL-card. Recordings accepted.

GUIANA (French)

L.T: GMT –3 h – **Pr.L:** French.

OFFICE DE RADIODIF. TELEVISION FRANÇAISE (ORTF)
ADDR: B.P. 336, Cayenne. **Te:** 355 – **L.P:** Délégue Reg: F. Jacquemart. St. Mgr: C. Barrat. Dir. Tec: G. Guimont.
STATIONS (G.C: 52.00W/05.00N): 1500kc 200m 1kW – 3385kc 88.63m 4kW – 4892kc 61.32m 1kW – 6170kc 48.62m 4kW
HOME SCE: 09.15–11.00 on 1500/3385/4892kc, 15.00–17.30 on 1500/4892/6170kc, 20.30–01.00(Sat 02.00) on 1500/3385/4892kc – **N:** 10.30, 16.30, 22.30 – **ANN:** "Ici Cayenne, Office de Radiodiff. Télévision Française".
INT-SIG: Guitar.



V. by letter. Recordings accepted – **ALF:** 30 Frcs.

PARAGUAY

L.T: GMT – 4 h – **Pr.L:** Spanish.

ADMINISTRACION NACIONALE DE TELECOMUNICACIONES
ADDR: Administración General, Cas. Correo 84, Asunción. **Cable:** Antelco. **Te:** 4001 – **L.P:** Dir: B. Guanes S.
STATIONS: All st's comm. exc. R. Nacional.
Short Waves: Call: ZP---.

	Call	kc	m	kW	N. and h of tr.
1)	A6	5975	50.21	3	R. Guarani Villarrica: 12.00–18.00, 21.00–03.00
2)	A10	6015	49.88	1	R. Paraguay, Asunción: 10.00–19.00, 20.00–02.00
3)	A1	6025	49.79	3	R. Nacional, Asunción: 11.00–17.00, 20.00–02.00
4)	A11	6110	49.10	1	R. Charitas, Asunción: 15.00–01.00
5)	A3	11850	25.32	3	R. Teleco, Asunción: 14.00–23.00
6)	A5	11945	25.12	5	R. Encarnación: 11.00–14.00, 16.00–24.00
7)	A7	15210	19.72	3	R. Guarani, Asunción: 12.00–16.00, 19.00–03.00

Medium Waves: Call: ZP--- °=Short Wave *=also FM.

	Call	kc	kW		Call	kc	kW		Call	kc	kW
8)	15	560	0.25	3)	1	°920	10	2)	10	°1300	1.5
9)	16	640	1	11)	9	970	1.5	14)	19	1330	1
10)	12	700	10	12)	14	1020	5	1)	6	°1360	1.5
7)	7	°730	1.5	13)	13	1060	1	5)	3	°1430	1
6)	5	°760	20	4)	11	°1200	1.5	15)	8	1480	1

Short Waves:
1) Alejo Garcia y Pte. Franco, Villarrica. **Te:** 85. **L.P:** Dir: E. Traversi P. **Ann:** "ZP6 y ZPA6, R. Guarani, Voz de Progreso y Cultura". **V.** by QSL-card or letter.
2) Av. Dr. Caspar R. de Francia 343, Asunción. **L.P:** Dir: G. Halley Mora. **V.** by QSL-card. Rp.
3) Victor Haedo 224, Asunción. **L.P:** Dir. Gen: A. Cáceres Almada. Dir. Tec: P. Pereira. **D.Prgr: N:** 16.30, 23.30, 02.30. **Ann:** "ZP1 y ZPA1, R. Nacional del Paraguay". **V.** by letter.
4) L. A. de Herrera 364, Asunción.
5) Av. Eusebio Ayala y Guarani, Asunción. **L.P:** Dir: S. Samaniego. **Ann:** "ZP3 y ZPA3, R. Teleco, Asunción, República del Paraguay". **V.** by letter.
6) Encarnación – 7) José F. Bogado y 7A, Asunción. **Te:** 6393. **L.P:** Dir. Tec: M. Saccarello. **V.** by letter.
Medium Waves:
8) **La Voz de Amambay**, Pedro Juan Caballero.
9) **R. Pte. Strossner**, Puerto Pte. Strossner.

10) **R. Carlos Antonio Lopóz,** Alberdi 200, Pilar. Te: 54. L.P: Dir. Gen: M. A. Rodriguez. Dir. Tec: M. A. Stete. D.Prgr: 10.00–02.00 in Spanish & Guarani. N: 10.00, 12.00, 12.55, 18.00, 21.00, 22.00, 22.55 – Ann: "La Onda de la Cordalidad". F.Pl: 1kW sw-tr.
11) **R. Comuneros,** Estados Unidas y 9° Pdas, Asunción.
12) **R. Nanduti,** Antiguera 654, Asunción – 13) **R. Boquerón,** Alberdi – 14) **R. Nuevo Mundo,** Cnel. Oviedo, Nuevo Mundo – 15) **R. Concepción,** Concepción.

PERU

L.T: GMT –5 h – Pr.L: Spanish

JUNTA PERMANENTE NACIONAL DE TELECOMUNICACIONES
ADDR: Av. Arequipa 734, Lima. Te: 35-965.

ASOCIACION NACIONAL DE RADIOEMISORAS DEL PERU
Av. Tacna 543, Lima.

STATIONS: All st's comm. exc. 65), 67), 73), 74), 75), 96), 149) (Gov); 17), 35), 42), 77), 110), 139), 161), 166) (Cult).

	Call	kc	m	kW	Name and h of tr.
1)	OBX7D	3230	93.00	0.4	R. El Sol de los Andes, Juliaca: 11.30–06.00
2)	OBX4U	3240	92.59	1	R. América, Lima: 13.00–06.00
3)	OAZ4G	3250	92.31	0.4	R. La Oroya, La Oroya
4)	OBX1E	3280	91.40	1	R. San Miguel, Piura
5)	OBZ4E	3290	91.90	0.5	R. Universal, Callao: 22.30–03.15
6)	OBX4Y	3300	90.85	0.45	R. Junin, Huancayo
7)	OBZ4I	3320	90.34	1	R. Erpa, San Vicente de Cañete: 18.00–08.00
8)	OAX3P	3325	90.23	0.5	R. Tingo Maria, Tingo Maria
9)	OAX1M	3330	90.09	1	R. Progreso, Piura: 12.00–05.00
10)	OAX5J	3350	89.55	1	R. Independencia, Ica
11)	OAX3Q	3355	89.42	0.5	R. Ondas de Huallaga, Huánuco
12)	OAX3D	3360	89.29	0.5	R. Huánuco, Huánuco
13)	OAX1O	3380	88.76	1	R. Chiclayo, Chiclayo: 12.00–05.00
14)	OBZ4M	3385	88.63	1	R. La Voz del Valle del Mantaro, Jauja
15)	OCX4R	3390	88.50	0.3	R. Instituto Industrial, La Oroya
16)	OAX3G	3890	77.12	0.5	R. Chimbote, Chimbote: 12.00–06.00
17)	OAX7O	3960	75.76	0.5	R. Madre de Dios, Puerto Maldonado: 23.00–06.00
18)	OCX4W	4762	63.00	1	R. Inca, Lima: 11.00–07.00
19)	OAX2G	4770	62.89	0.5	R. Cajamarca, Cajamarca
20)	OAX3V	4785	62.70	1	R. Horizonte, Huanuco
21)	OAX5X	4790	62.63	0.4	R. Nazca, Nazca: 12.00–06.00
22)	OBX7C	4800	62.50	0.5	R. Onda Azul, Puno: 10.45–04.15
23)	OBX1C	*4815	62.31	1	R. La Voz de la Frontera, Tumbes
24)	OAX8X	4815	62.31	1	R. Amazonas, Iquitos: 11.00–05.00
25)	OAX5U	4815	62.31	1	R. La Voz de Huamanga
26)	OAX7K	4820	62.24	0.45	R. Puno, Puno: 01.00–04.00
27)	OAX8R	4825	62.18	1	R. San José, Indiana Mainas
28)	OAZ4J	4835	62.05	0.5	R. Sudamericana, Lima
29)	OAX7T	4835	62.05	0.35	R. Sicuani, Sicuani
30)	OAX8F	4840	61.98	1	R. Atlántida, Iquitos
31)	OBX4E	4840	61.98	1	R. Andahuaylas, Andahuaylas
32)	OAX1X	4845	61.92	1	La Voz de Chira, Sullana
33)	OAX8I	*4855	61.79	0.5	R. La Hora, Iquitos
34)	OCX4B	4860	61.73	0.5	R. Callao: 12.00–05.00
35)	OCX4T	4870	61.60	0.5	R. Obispado de Huancayo: 11.30–12.30 17.30–18.00, 23.00–01.00
36)	OCX4E	4880	61.48	1	R. Once Sesenta, Lima: 12.00–05.00
37)	OAX5V	4885	61.45	1	R. Villa Rica, Huancavelica
38)	OAZ4T	4895	61.29	0.4	R. Chanchamayo, La Merced
39)	OAX2K	4910	61.10	0.5	R. Libertad, Trujillo
40)	OAX2H	4915	61.03	0.5	R. La Hora, Trujillo: 12.00–06.00
41)	OBX7H	4920	60.89	1	R. Ondas del Titicaca, Puno
42)	OOX5Q	4934	60.80	0.25	R. Concejo Provincial, Abancay
43)	OAX9E	4935	60.80	1	R. Tropical, Tarapoto: 11.00–04.00
44)	OAX6N	4940	60.73	0.5	R. El Misti, Arequipa: 12.00–04.30
45)	OAZ4R	4940	60.73	0.5	R. San Juan, Tarma: 12.00–04.30
46)	OAZ4I	*4945	60.67	0.4	R. Huacho, Huacho
17)	OBX7I	4950	60.60	0.5	R. Madre de Dios, Puerto Maldonado
47)	OAX5S	4955	60.54	0.25	R. Amauta, Huanta
48)	OAX1S	4960	60.48	0.5	R. Lambayeque, Chiclayo: 11.15–05.00
49)	OAZ4C	4995	60.06	1	R. Andina, Huancayo 11.00–05.00
50)	OAX2S	5005	59.94	0.25	R. Jaén, Jaén
51)	OAX8V	5010	59.88	0.4	R. El Eco, Iquitos
52)	OAX5O	*5010	59.88	1	R. Pisco, Pisco
53)	OAX7Z	5015	59.82	0.35	R. Juliaca, Juliaca: 12.00–14.00 17.00–19.00, 22.00–04.00
54)	OAX7Q	5025	59.70	0.3	R. Quillabamba Quillabamba: 12.00–24.00
55)	OBX7F	5035	5958.	0.5	R. Ayaviri, Ayaviri: 11.00–05.00
56)	OAX6U	5035	59.58	1	R. Ilo, Ilo: 12.00–05.00
57)	OBZ4P	5040	59.52	1	R. Reloj Lima
58)	OBX7O	5045	59.46	1	R. Onda Imperial, Cuzco
59)	OAX1J	5050	59.41	0.4	R. Tumbes, Tumbes
60)	OAZ4A	5058	5931.	0.33	R. Tarma, Tarma
61)	OAX4P	5955	50.39	0.5	R. Huancayo, Huancayo: 11.30–04.30
62)	OAX7L	5960	50.34	0.25	La Voz del Altiplano, Puno
63)	OBX4Q	5970	50.25	10	R. El Sol, Lima: 11.00–05.00
64)	OBX4M	5980	50.17	5	R. Panamericana, Lima: 12.00–16.00 23.00–04.00
59)	OAX1W	5990	50.08	1	R. Tumbes, Tumbes
65)	OAX7E	6000	50.00	1	R. Nacional, Puno: 12.00–05.00
2)	OAX4V	6010	49.92	2.5	R. América, Lima
66)	OAX4Q	6020	49.83	1	R. Victoria, Lima: 11.00–06.00
67)	OAX8B	6028	49.77	1	R. Nacional, Iquitos: 11.00–05.00
68)	OAX6B	6035	49.71	0.2	R. Landa, Arequipa: 12.00–05.00
69)	OAX6A	6042	49.65	0.25	R. Arequipa, Arequipa 12.00–04.30
70)	OAX6E	6055	49.55	1	R. Continental, Arequipa: 11.00–06.00
71)	OAX8L	6062	49.48	0.25	R. Telestar, Pucallpa: 12.00–14.00 16.00–19.00, 23.00–03.00
72)	OBX4O	6070	49.42	0.3	R. Onda Popular, Lima: 24 h
73)	OAX4Z	6082	49.32	15	R. Nacional, Lima: 11.00–05.00
74)	OAX4H	6095	49.22	0.25	R. Mundial, Lima: 12.00–05.00
75)	OAX6F	6105	49.14	1	R. Nacional, Tacna: 12.00–05.00
76)	OBX4Z	6115	49.06	1	R. Luz, Lima: 12.00–05.00
77)	OBZ4O	6115	49.06	10	R. Union, Lima
78)	OCX4A	*6123	49.01	1	R. La Crónica, Lima
79)	OAX7A	6128	48.96	0.1	R. Cuzco, Cuzco: 23.00–05.00
80)	OCX4M	6135	48.90	0.5	R. Pasco, Cerro de Pasco
81)	OAX1A	6140	48.86	0.2	R. Delcar, Chiclayo: 00.00–05.30
82)	OAX9B	6140	48.86	0.02	R. Amazonas, Obispado de Chachapoyas
83)	OAZ4E	6145	48.82	0.5	R. Mineria, Yauli
84)	OBX4G	6150	48.78	2	R. Excelsior, Lima: 12.00–05.00
85)	OAX8Q	6155	48.74	1	R. Pucallpa, Pucallpa
86)	OCX4G	6160	48.70	1	R. Mundo, Huancayo 11.00–05.00
87)	OAX2A	6165	48.66	0.4	R. Trujillo, Trujillo: 12.15–05.30
88)	OBX4B	6170	48.62	0.35	R. Corporación, Cerro de Pasco: 10.00–05.00
89)	OAX7C	6175	48.58	0.3	R. Tahuantisuyo, Cuzco
90)	OBX4P	6180	48.54	0.5	R. Miraflores, Lima: 13.00–05.00
91)	OAX4G	6190	48.47	0.4	R. Lima, Lima: 12.00–06.00
92)	OAX1Y	6198	48.40	0.3	R. Sudamericana, Piura: 12.00–05.00
93)	OAX8E	9504	31.56	1	R. Loreto, Iquitos: 11.00–05.00
94)	OAX6H	9505	31.56	0.2	R. Tacna, Tacna: 10.30–05.20
2)	OAX4W	9510	31.55	2.5	R. América, Lima
78)	OAX4J	9520	31.51	5	R. La Crónica, Lima
75)	OAX6G	9530	31.48	0.3	R. Nacional, Tacna: 12.00–05.00
95)	OAX4K	9545	31.43	0.5	R. Central, Lima: 12.00–06.00
96)	OAX1Z	9550	31.41	2.5	R. Nacional, Tumbes 11.00–05.00
73)	OAX4R	9562	31.37	40	R. Nacional, Lima: 12.00–05.00
65)	OAX7F	9570	31.35	1	R. Nacional, Puno: 12.00–05.00
97)	OBX4K	9585	31.30	0.5	R. Selecta, Lima: 13.00–04.30
98)	OAX5C	9590	31.28	0.2	R. Ica, Ica: 11.00–04.00
99)	OAX3E	9600	31.25	0.5	R. Huaraz, Huaraz
100)	OAX1R	*9600	31.25	0.45	R. Talara, Talara
67)	OAX8C	9610	31.22	1	R. Nacional, Iquitos: 12.00–05.00
1)	OBX7E	9618	31.19	0.4	R. El Sol de los Andes, Juliaca: 11.30–06.00
30)	OAX8K	9625	31.17	1	R. Atlántida, Iquitos: 11.00–05.00
101)	OCX4K	9635	31.14	1	R. Expreso, Lima: 12.00–05.00
102)	OAX1T	9645	31.10	0.5	R. Grau, Piura
51)	OAX8U	9665	31.04	1	R. El Eco, Iquitos
103)	OAZ4L	9675	31.01	7.5	R. Del Pacifico, Lima 12.00–03.00
104)	OCX4Y	9695	30.94	1	R. Continente, Lima: 11.30–06.00
43)	OAX9D	9710	30.90	1	R. Tropical, Tarapoto 11.30–04.00
66)	OCX4C	9720	30.86	1	R. Victoria, Lima
105)	OAX7J	*9730	30.83	0.45	R. La Hora, Cuzco
106)	OAX8W	9750	30.77	2.1	R. Sideral, Pucallpa
70)	OAX6D	9760	30.74	1	R. Continental, Arequipa
24)	OAX8O	9770	30.71	1	R. Amazonas, Iquitos
73)	OBX4R	*11914	25.19	40	R. Nacional, Lima
73)	OAX4T	15150	19.80	15	R. Nacional, Lima: irr.
63)	OBX4C	*15180	19.76	1	R. El Sol, Lima
73)	OBX4T	*21600	13.89	50	R. Nacional, Lima

Medium Waves °=also on Short Wave.

	Call	kc	kW		Call	kc	kW
52)	OAX5P	°560	1	139)	OAX8M	1200	0.5
107)	OBZ4L	560	1	140)	OAX2A	1210	1
76)	OBX4L	°590	1	141)	OAX5G	1220	1
108)	OAX6S	600	0.5	73)	OCX4Z	°1225	3
109)	OAX2M	620	0.45	17)	OBX7J	°1230	0.5
110)	OAX7V	620	1	85)	OAX8P	°1250	1
25)	OAX5T	°620	1	75)	OAX6D	°1250	0.35
103)	OAZ4K	°640	10	90)	OAX4L	°1250	5
22)	OBX7B	°640	1	102)	OAX1H	°1270	0.5
111)	OAX5R	650	1	98)	OAX5B	°1270	0.15
112)	OAX2N	650	1	41)	OBX7G	°1270	1
113)	OBX4A	670		51)	OAX8T	°1270	1
5)	OAX4A	°670	1	46)	OAZ4H	°1270	1
114)	OCX4S	680	0.15	48)	OAX1I	°1300	1
3)	OAZ4F	°690	0.4	49)	OAZ4B	°1300	1
70)	OAX6C	°690	2	51)	OAX7P	°1300	0.35
16)	OAX3F	°690	1	142)	OAX4M	1300	1
115)	OBZ4H	700	1	143)	OAX6P	1300	0.4
116)	OBZ4O	710	0.15	53)	OAX7X	°1300	0.3
117)	OBX7Q	720	0.5	78)	OAX4I	°1320	10
10)	OAX5E	°730	1.5	100)	OAX1F	°1320	1
28)	OBX4S	°730	1	43)	OAX9C	°1340	1
92)	OAX1B	°750	0.25	44)	OAX6L	°1340	0.5
118)	OAX3T	750	1	144)	OAX5D	1340	0.5
119)	OAX5Z	760	1	145)	OAZ4M	1340	0.2
120)	OBX7N	770	0.4	146)	OAX5H	1340	0.5
66)	OAX4X	°780	10	147)	OAZ4Q	1340	0.5
121)	OAX2I	790	5	13)	OAX1E	°1340	1
122)	OAZ4U	800	0.5	11)	OAX3N	°1350	1
27)	OAX8S	°810	5	84)	OAX4Y	°1360	1
123)	OAX2J	820	1	29)	OAX7R	°1365	0.35
124)	OAX4O	820	1	148)	OAX3H	1370	1
125)	OAX3S	830	1	149)	OAZ4O	1370	0.5
73)	OAX4H	°854	10	150)	OAX8G	1370	0.5
126)	OAZ4Y	870	0.25	151)	OAX5I	1370	0.5
127)	OBX1F	870	1	152)	OAX5F	1370	0.5
77)	OBZ4N	°880	10	6)	OBX4V	°1370	1
9)	OAX1D	°890	1	19)	OAX2D	°1370	0.5
63)	OBX4X	°900	10	59)	OAX1G	°1370	1
128)	OBX1G	920	1	45)	OAZ4P	°1400	0.5
129)	OBZ4J	920	1	34)	OBX4W	°1400	2.5
95)	OAX4E	°930	5	153)	OAX2O	1400	1
130)	OBX7L	940	0.5	68)	OAX6J	°1400	0.2
64)	OAX4D	°960	10	105)	OAX7I	°1400	0.45
40)	OAX2F	°980	0.4	154)	OAX6S	1420	1.5
101)	OBX4J	°985	5	155)	OAZ4V	1430	0.5
14)	OBZ4R	°990	1	104)	OCX4X	°1440	1
2)	OAX4U	°1010	10	156)	OAX6R	1440	1
62)	OAX7N	°1030	0.25	32)	OAX1V	°1460	1
67)	OAX8A	°1030	1	12)	OAX3C	°1460	0.25
55)	OBX7F	°1035		1)	OAX7W	°1460	1
72)	OAX4S	°1040	1	157)	OAX5K	1460	2.5
20)	OAX3U	°1060	1	18)	OBX4E	°1470	5
31)	OBX5D	°1060	1	61)	OCX4D	°1470	1
87)	OAX2B	°1070	2.1	79)	OAX7G	°1470	0.15
131)	OAX5A	1070	0.25	158)	OAX6K	1470	0.3
74)	OAX4F	°1080	1	33)	OAX8H	°1470	0.45
4)	OBX1D	°1080	5	159)	OBX4I	1490	1
8)	OAX3I	°1080	0.5	80)	OCX4P	°1490	0.5
132)	OAX7S	1080	1	30)	OAX8J	°1490	1
24)	OAX8N	°1080	1	42)	OAX5L	°1490	0.25
60)	OAX2B	°1095	2	21)	OAX5N	°1490	0.3
133)	OAZ4W	1100	1	160)	OCX4V	1510	0.3
134)	OCX4S	1100	0.15	60)	OCX4J	°1510	0.1
73)	OBX4A	°1120	20	161)	OAX2L	1510	1
97)	OAX4N	°1130	2.6	162)	OAX6M	1510	
26)	OAX7H	°1130	0.45	93)	OAX8D	°1520	1
100)	OAX1Q	°1130	1	57)	OBX4D	°1520	1
38)	OAZ4S	°1130	0.4	83)	OAZ4D	°1520	0.5
135)	OAX3R	1140	1.2	81)	OAX1C	°1520	0.15
136)	OAX5W	1140	0.5	163)	OBZ4S	1530	1
36)	OAX4C	°1160	5	88)	OBX4N	°1540	0.3
65)	OAX7D	°1160	0.2	164)	OAZ4N	1540	0.15
96)	OAX1K	°1160	1	165)	OAX6Q	1540	0.5
39)	OAX2C	°1160	0.3	23)	OBX1B	°1540	1
99)	OAX3B	°1160	0.5	86)	OCX4F	°1560	10
137)	OAX3O	1180	0.5	166)	OAX7U	1560	0.35
138)	OBZ4A	1180	0.5	167)	OAX7Y	1570	1
91)	OAX4B	°1200	2.5	37)	OAX5M	°1580	0.15
89)	OAX7B	°1200	0.3	168)	OAZ4Z	1590	5

Short Waves:

1) Casilla 11, Juliaca. **Te:** 81. **L.P:** Dir. Gen: S. Davila U. Dir. Tec: E. Esquivar. **D.Prgr:** N: 12.00. **Ann:** "Desde el Altiplano Peruano transmite "El Sol de Los Andes", ud. Sintoniza la emisora más popular del Sur del Peru". **Int-Sig:** Xylophone. **V.** by letter. Recordings accepted. **F.PL:** 5kW (mw).

2) Cas. 1192, Lima. **Te:** 45440. **L.P:** Dir. Gen: N. González V. Dir. Tec: D. Capella. **V.** by QSL-card.

3) Ca. Tarma 195, La Oroya. **Ann:** "OAZ4F, 1470kc onda larga y OAZ4G en 3250kc onda tropical, banda de 92mts, R. La Oroya de la Oroya, afiliada a la Asociación de R. Victoria, Lima, Peru" – 4) Av. Sanchez Cereo 2A Cuadra, Piura.

5) Buenos Aires 934, La Punta, Callao. **L.P:** Dir. Gen: R. Nieto. St. Mgr: M. Nieto. Dir. Tec: S. Raspa. **D.Prgr:** 13.00–03.15 (mw). **N:** 13.00. **Ann:** "OAZ4L en 670kc y OBZ4E en 3290kc onda corta tropical transmite R. Cultura desde La Punta, Callao, Peru. Mayor potencia, calidad transmite R. Cultura desde La Punta, Callao".

6) Callao 120, Huancayo. **L.P:** Mgr: R. Tasa Z. **V.** by QSL-card.

7) Apt. 70, Cañete. **Te:** 2261. **L.P:** Dir: J. A. Lasunción. Dir. Tec: I. Benavent. **D.Prgr:** N: 06.00. **Ann:** "R. Erpa la Mas Cultural" or "*Sintonizan R. Erpa, una Voz al servicio de la cultura*" or "En los 3320kc, transmitiendo en onda corta Sintonizan R. Erpa una voz al servicio de la cultura". **V.** by letter.

8) Jirón Independencia 218, Tingo María – 9) Ica 419, Piura. **Ann:** "R. Progreso de Piura transmite para todo el Perú" – 10) Cajamarca 194, Ica.

11) Apt. 343, Huánuco. **Te:** 2428. **L.P:** Dir: E. Pastrana. **V.** by letter – 12) Altos Municipalidad, Huánuco.

13) Balta 618, Chiclayo. **Ann:** "La Emisora Más Popular del Norte" or "R. Chiclayo transmitiendo para todo el Perú" – 14) Junin 1131, Jauja. **V.** by letter – 15) Av. Arequipa 201, La Oroya.

16) Jr. Villavicencio 267, Chimbote. **Ann:** "La Emisora de los Mejores programas" or "Transmite OAX3F R. Chimbote en 690kc de frecuencia desde el Departamento de Ancash, Perú".

17) Puerto Maldonado, Madre de Dios. **L.P:** Dir: Joaquin B. Dir. Tec: T. Guerrero. **Ann:** "Emisora Madre de Dios en Maldonado, Emisora Cultural al servicio de la Iglesia Católica".

18) Av. Wilson 1191, Lima. **Te:** 39808. **L.P:** Dir. Gen: A. S. Irei S. Dir. Tec: A. Telleria S. **D.Prgr:** N: Every 30 min's from 12.00–05.00. ***Ann:*** *"Aqui R. Inca del Perú".* **V.** *by QSL-card. Recordings accepted.*

19) Plaza de Armas, Cajamarca.

20) Av. Raymondi, Lote 6, Tingo Maria. **L.P:** T. Maldonado B,

21) Apt. 54, Nazca. **Te:** 2199. **L.P:** Dir: A. Cordoba B. St. Mgr: E. Cajo E. **Ann:** "OAX5N y OAX5X R. Nazca su compañera musical transmite en sus frecuencias de 1490kc y 4790 ondas media y corta respectivamente de sus estudios en urbanizacion pencal, Nazca, Perú". **V.** by letter. Rp. Recordings accepted.

22) Cas. 210, Puno. **L.P:** Dir. Gen: R. Kearns. Dir. Tec: J. Amiel R. **Ann:** "R. Onda Azul, Escuelas Radiofonicas del Peru, Puno, en trabajo simultàneo con sus dos transmisores: 4800kc onda corta, 640kc onda larga". **V.** by QSL-card or letter. Recordings accepted – 23) Alfonso Ugarte 12, Tumbes.

24) Jirón Lima 958, Iquitos. **Te:** 2740. **L.P:** Dir. Gen: M. Iglesias N. St. Mgr: M. Meléndez C. **D.Prgr:** N: 12.00, 03.00. **V.** by letter. Recordings accepted – 25) Pasaje Macate 151, Huamanga.

26) Arequipa 100, Puno. **L.P:** Dir. Gen: J. Zea Gonzalez. Dir. Tec: R. Laso V. **Ann:** "La Emisora de los Mejores Programas" or "La Voz del Departamento más poblado del Perú". **V.** by QSL-card.

27) Apt. 216, Iquitos. **L.P:** Dir: L. Tremblay.

28) Av. Tacna 359, Lima – 29) Plaza de Armas 106, Sicuani.

30) Apt. 277, Iquitos. **L.P:** Dir: J. Reátegui B. Dir. Tec: M. Panduro. **Ann:** "Una Voz loretana para el Perú y el Mundo" or "La Emisora delos mejores programas". **V.** by QSL-card.

31) Antonio Trelles 236, Andahuaylas – 32) Sucre 556, Sullana – 33) San Martin 126, Iquitos. **Ann:** "La Voz de la Juventud Loretana en el Cielo Amazónico".

34) Colón 260, Callao. **Te:** 91000. **L.P:** Dir. Gen: A. Salazar P. Dir. Tec: C. Freund. **Ann:** "OBX4W 1400kc y OCX4B 4860kc, transmite R. Callao" or "La Voz del Primer Puerto del Peru". **V.** by letter. Recordings accepted. **F.PL:** 10kW.

35) Cas. 245, Huancayo. **Te:** 3009. **L.P:** Dir. Gen: M. Jacinto. Dir. Tec: J. Moran M. **Ann:** "R. Cultural "La Merced" en su frecuencia de 4870kc banda de 60 metros desde Umutu, Huancayo, Perú". **V.** by letter. Recordings accepted. **F.PL:** mw, 5kW sw.

36) Av. Manco Cápac 333, La Victoria. **L.P:** Dir. Tec: J. Seminario. **Ann:** "R. Once Sesenta, la primera emisora dedicada a la mujer".

37) Virrey Toledo 468, Huancavelica.

38) Apt. 96, La Merced. **Te:** 68. **L.P:** Dir: A. Espejo P. **Ann:** "R. Chanchamayo OAZ4S 1130kc y OAZ4T 4895kc, onda corta, banda de 60 metros transmite R. Chanchamayo desde La Merced, Capital Cafelera del Peru, emisora afiliada a la Cadena Nacional de R. Victoria". **V.** by letter or QSL-card. Recordings accepted. Prgr. schedule free – 39) Zepita 430, Trujillo – 40) Zepita 439, Trujillo. **Ann:** "R. La Hora, la emisora de los exitos" – 41) Ca. Arequipa 323, Puno – 42) Sede del Concejo Municipal de Abancay, Abancay.

43) Cas. 31, Tarapoto. **L.P:** Mgr: J. Pablo M. Dir: C. Augusto S. Dir. Tec: V. Lack. **D.Prgr:** N: 12.30, 17.30. **Ann:** "R. Tropical transmite con sus tres Poderosas Ondas desde Tarapoto, Departamento de San Martin". **V.** by QSL-card or letter. Recordings accepted.

44) Apt. 657, Arequipa. **L.P:** Mgr: R. Zuñiga G – 45) Jirón Huánuco 488, Tarma – 46) Av. Echenique 140, Huacho – 47) Jr. Lima s/n, Huanta – 48) Balta 413, Chiclayo.
49) Ca. Real 319, Chilca, Huancayo. **Ann:** "Del centro urbano más importante transmite R. Andina". V. by letter – 50) Ca. Comercio 301, Jaén. **L.P:** Dir: A. Vilchez R – 51) Ca. Morena 20, 22, Iquitos.
52) Av. Huayna Capac 1345, Pisco. **L.P:** Dir: A. Pereyra B.
53) Ca. 9 de Diciembre 199, Juliaca. **L.P:** Dir. Gen: J. Zea Gonzalez. Dir. Tec: V. Urviola. **Ann:** "Desde el corazón de los Andes". V. by letter.

54) Ca. Libertad, Quillabamba. **L.P:** Dir: J. Aniz B. Dir. Tec: E. Cerveró D. **D.Prgr: N:** 23.30. **Ann:** "OAX7Q R. Quillabamba en el Selva Peruano y las Orillas del Rio Vilcanota". V. by letter. Recordings accepted.
55) Arica 210, Ayaviri. **L.P:** Dir. Gen: J. A. Solórzano M. Dir. Tec: G. Valdivia M. **D.Prgr: N:** 13.00. **Ann:** "OBX7F en 5035kc, R. Ayaviri". V. by letter.
56) Ca. Moquegua, Ilo. **Te:** 196. **L.P:** Dir. Gen: L. Sardón U. St. Mgr: A. Sardón U. Dir. Tec: R. Quiroga G. **D.Prgr: N:** 17.30, 01.00. **Ann:** "En transmisión OAX6U 5035kc banda tropical de onda corta R. Ilo la freq. de oro llevando hasta vuestros hogares en mensaje de peruanidad desde la costa Sur del Perú". V. by letter.
57) Ocoña 484, Lima – 58) Av. Tulumayo 744-C, Cuzco – 59) Plaza de Armas, Tumbes. **Ann:** "La Voz de la Juventud" – 60) Jr. Huaraz 198, Tarma.

61) Cas. 187, Huancayo. **L.P:** Dir: A. Elejalde G. **Ann:** "La Voz del Centro del Perú" or "OCX4D y OAX4P, R. Huancayo La Voz del Centro del Perú".
62) Apt. 130, Puno. **L.P:** Dir. Gen: H. Carjabal D. St. Mgr: H. de Carjabal. *Dir. Tec: L. Reyes B.* **D.Prgr:** *1030kc: 11.00–05.00 in* Spanish; 5808kc: 12.00–04.00 (English 03.00–04 00). **N. in Spanish:** 12 00, 18 00, 02.00. **Ann:** Sp: "Desde Puno Capital Folklórica del Peru, R. La Voz del Altiplano". E: "From Puno City, The Folklore Capital of Peru. R. La Voz del Altiplano". **Int-Sig:** First movement from "Himno al Sol" composed by R. Huirse. V. by QSL-card or letter – 63) José Galvez 1040, Santa Beatriz, Lima.

64) Av. Arequipa 1110, Lima. **L.P:** Dir: H. Delgado P. Dir. Tec: M. Flores. **D.Prgr: N:** 13.00, 14.00, 15.00, 16.00, 17.30, 17.45, 19.00, 20.00, 21.00, 22.00, 23.00, 00.00, 01.00, 02.00, 03.00, 03.15, 04.00, 05.00. **Ann:** "Sabe quién transmite? R. Panamericana" or "Panamericana ciudad de Lima". V. reports not wanted – 65) Puno.
66) Av. Tacna 225, Lima. **L.P:** Mgr: J. Cavero. Dir. Tec: E. Lastarria. **Int-Sig:** First movement of Beethoven's 5th Symphony. V. by letter – 67) Iquitos. V. by letter – 68) Sucre 409, Arequipa. **L.P:** Dir: M. J. Landa. V. by QSL-card – 69) Apt. 657, Arequipa. **L.P:** Mgr: R. Zuñiga G. **Ann:** "La Voz del Misti".

70) Av. Independencia, Arequipa. **L.P:** Mgr: J. A. Umbert. **Ann:** "OAX6C, OAX6D y OAX6E Emisoras de R. Continental de Arequipa".
71) Raymondi 185, Pucallpa. **L.P:** Dir: A. Chaque. **Ann:** "R. Telesar, La Voz del Progreso y Cultura". V. by letter.
72) Av. N. de Pierola 624, Lima. **L.P:** Dir. Gen: P. Tello. Dir. Tec: G. Rojas. **D.Prgr: N:** 03.30. **Ann:** "R. Onda PO-PU-LAR". V. by letter. Recordings accepted.
73) Petit Thouras 441, Lima. **L.P:** Dir. Gen: G. Lazarte E. Dir. Tec: R. Raggio & R. Pflucker. **Ann:** "R. Nacional del Perú, la primera emisoras del pais". V. by QSL-card.
74) Union 733, Lima. **L.P:** Dir: M. Luna. Dir. Tec: D. Capella.
75) Cas. 113, Tacna. V. by letter.
76) Tacna 543, Lima. **L.P:** Dir: W. R. Quintas. **Ann:** "R. Luz, la primera emisora del dial". V. by QSL-card – 77) Av. Abancay 377, Lima.

78) Tacna 665, Lima. **L.P:** Dir. Gen: J. Silva.
79) Saphi 601, Cuzco. **L.P:** Dir: C. Lizarraga. **Ann:** "La Voz de la Capital Arqueológica de America".
80) Apt. 128, Cerro de Pasco. **L.P:** Dir: L. Rosazzo. **Ann:** "Radiodifusora Cerro de Pasco S. A, Afiliada a la Federación Peruana de R. dif. y Cadena Nacional de Emisoras".
81) Av. Balta 628, Chiclayo. **L.P:** Dir: J. C. Montjoy. **Ann:** "La Voz del Norte para todo el Perú" or "La Emisora que está mas tiempo en su dial". V. by letter – 82) Sede del Obispado de Chachapoyas, Amazonas – 83) Dario León 313–538, Yauli.
84) Manco Capac 333, La Victoria, Lima. **L.P:** Dir: A. Belmont. Dir. Tec: J. Farfán. **Ann:** "Transmite R. Excelsior la emisora más criolla del Perú".

85) Pucallpa. **L.P:** Dir. Gen: D. Zevallos R. Dir. Tec: M. Iwamoto.
86) Ca. 426, Huancayo. **L.P:** Dir: M. Huanay G. V. by letter.
87) Plaza del Armas, Edif. de la Beneficencia, Trujillo. **L.P:** Dir: J. Castro. **Ann:** "La Voz del Norte del Peru". V. by letter.
88) Apt. 19, Cerro de Pasco. **Ann:** "La Voz de Cerro de Pasco".
89) Av. Sol 930, Cuzco. **L.P:** Dir: R. Montesinos E. **Ann:** "La Emisora de los grandes éxitos" – 90) Larco 760, Miraflores, Lima.
91) Esq. Petit Thours y Saco Olivieros 311, Lima. **Te:** *42881.* **L.P:** Dir: O. Dianderas. Dir. Tec: W. Cross. **D.Prgr: N:** 17.45, 03 00. **Ann:** "Transmite R. Lima, indicando las siglas correspondientes". V. by letter – 92) Tacna 871, Piura. **Ann:** "La Decana del Departamento". V. by letter.
93) Arica 30, Iquitos. **L.P:** Dir: R. Curzado. **Ann:** "Desde el Corazón de la Amazoná Peruana transmite R. Loreto La Voz del Oriente Peruano" or "Transmite R. Lorcto desde Iquitos".
94) Cas. 188, Tacna. **L.P:** Dir: J. Cáceres. **Ann:** "Transmite R. Tacna y La Voz del Sur simultáneamente". V. by letter.
95) Belen 1038, Lima. **L.P:** Dir: G. D. Brandt. Dir. Tec: A. Gonzalez A. **Ann:** "En su receptor y en todas partes R. Central, La Emisoras más Popular" – 96) Tumbes. V. by letter.
97) Nicolás de Piérola 1014, Lima. **Ann:** "Esta es OAX4N, R. Selecta de Lima, una emisora al servicio de la cultura musical del pais".
98) San Martín 251, Ica – 99) Jirón Cuzco 107, Huaraz – 100) Altos *Cine Talara, Talara* – 101) Paseo Colón 299, *Lima.*
102) Cuzco 850, Piura. **L.P:** Dir: J. Girón S.
103) Apt. 4236, Lima. **Te:** 76911 **Cable:** Team, Lima. **L.P:** Dir. Gen: N F. Mydske. Mgr: E. Paredes. Dir. Tec: J. Newing. **D.Prgr: N:** 12.10, 12.30, every h from 13.00–18.00 and from 22.00–03.00. **Ann:** "Desde Lima transmiten R. del Pacifico y R. del Pacifico FM". V. by letter. Prgr. schedule free.
104) Camaná 615, Of. 802, Lima. **Ann:** "En 1440kc R. Continente, el punto de sintonia en *Lima, Perú" – 105)* San Bernardo 132, Cuzco – 106) Coronel Portillo 446, Pucallpa. **L.P:** Dir: F. Rodriguez R.

Medium Waves:

107) **La Voz de Oriente,** Av. Abancay 210, Lima – 108) **R. Cultural Toquepada,** Box 303, Tacna – 109) **R. Chepen,** Ca. Lima 597, La Libertad – 110) **Gran Unida Escolar Inca Garcilazo,** Av. de Cultura, Cuzco.
111) **R. Regionalista,** Salverry s/n, Ica – 112) **R. Ondas del Norte,** Av. Victor Larco – 113) **R. Cultura** – 114) **R. Imperial,** Ayacucho 598, Cañete – 115) **R. Progreso,** Av. de la Márina, San Miguel.
116) **R. Imperial,** Jirón Miguel Grau, Lunahuaná – 117) **R. Triunfo,** Ca. Tandapata 715, San Blas – 118) **R. Mundo,** Manuel Ruiz 504, Chimbote – 119) **R. Latino,** Ca. Independencia, Ica – 120) **R. Have,** Puno.
121) **C.R.U,** Urbanización California, Trujillo – 122) **R. San Juan,** Ca. Derecha 483, Huaral – 123) **R. Sudamericana,** Independencia 565, Trujillo – 124) **R. Libertad,** Unión 1038, Lima – 125) **R. Casma,** Manco Capac 115, Casma.
126) **R. La Montana,** F. Irázola, Manzana 10, Satipo – 127) **C.R.U.** Camino A. Pimentel, Chiclayo – 128) **R. Heroica,** E. Aguirre 828, 3to Piso, Chiclayo – 129) **R. Bolognesi,** Jirón Loreto 359, Huancayo – 130) **R. Wilcomayo,** Parque E. Mejia-Rosaparta, Sicuani.
131) **R. Centinela,** Av. Los Incas, S. Juan, Marcona – 132) **R. Salcantay,** Ca. Almirante, Cuzco – 133) **R. Musical,** Cra. Panamericana Nte. KM 187.5, Barranca – 134) **R. Imperial,** Ca. 2 de Mayo 573, Cañete – 135) **R. Bahia,** Pasaje 151, Chimbote.
136) **R. Chinchaysuyo,** Jirón Maurtua 189, Chincha Alta – 137) **R. Huascaran,** Gamarra 104, Huaraz – 138) **R. San Antonio,** Pablo Nogsiglia 235, Cañete – 139) **R. Mariana,** Vicariato Apostólica, Iquitos – 140) **R. Universo,** M. Orbegoso 266, Trujillo.
141) **R. San Pedro de Grocio Prado,** Av. Progreso s/n, Dist. Grocio Prado, Chincha – 142) **R. Atalaya,** Manco Capac 333, La Victoria – 143) **R. Latina,** San Martin 561, Tacna – 144) **R. Chincha,** Los Angeles 322, Chincha – 145) **R. Huaral,** Av. Cahuas 447, Huaral.
146) **R. Ayacucho,** 28 de Julio 203, Ayacucho – 147) **R. Jauja,** Bolognesi 522, Jauja – 148) **R. Interamericana,** Alfonso Ugarte 441, Chimbote, Ancash – 149) **R. Exito,** J. Callao 159, Huacho, Lima – 150) **R. Sargento Lores,** Inspección Gen. del Ejército, Iquitos.
151) **R. Apuriamac,** Abancay – 152) **R. Huancavelica,** Chachapoyas 104, Huancavelica – 153) **R. Peru,** Jirón Trujillo 628, Chepen – 154) **R. Toquepala,** Campamento de Empleados Toquepala, Tacna – 155) **R. Universal,** Ca. Real 578, Tambo, Huancayo.
156) **R. El Tiempo,** Ca. Santa Martha 310, Arequipa – 157) **R. Internacional,** Av. 8 de Setiembre 210, Pisco – 158) **R. La Cruz del Sur,** Tacna – 159) **R. Santa Rosa,** Camana 152, Lima – 160) **R. Fessa,** Av. Mariscal Benafides, Cañete.
161) **R. Pascamayo,** Junin 57, Pascamayo – 162) **R. Universidad,** Local de la Universidad, Arequipa – 163) **R. La Nueva Voz del Centro,** Real Tambo 600, Tambo – 164) **R. San Pedro,** Av. 27 de Octubre, Mala – 165) **R. Surperuana,** Av. La Pax s/n, Don Bosco.
166) **Universidad Nacional del Cuzco,** Cuzco – 167) **Prelatura Nullius,** Apt. 46, Sicuani – 168) **R. Agricultura,** Paseo Colon 417, Lima.

SURINAM

L.T: GMT – 3 1/2 h – **Pr.L:** Dutch, Talkie, Hindustani.
RADIO APINTIE (Comm.)
ADDR: P.O. Box 1838, Paramaribo. **Te:** 5224. **Cable:** Fructomel.
STATION: PZX7 840kc 355m 1kW – **HOME SCE.** in Dutch, Talkie-Talkie, English, Hindustani, Javanese, Chinese: 08.00–03.30.
ANN: "R. Apintie, Paramaribo" – **INT-SIG:** The beat of the *Apintie* drum. – V. by letter.

RADIO PARAMARIBO (Comm).
ADDR: P.O. Box 975, Paramaribo. Te: 4131. Cable: Rapar – L.P: Dir. Gen: W. H. Lionarons.
STATION: 600kc 10kW – HOME SCE. in Dutch, Talkie-Talkie, English, Hindustani, Javanese, Chinese: 09.30–03.30 – ANN: "R. Paramaribo Rapar, de stem van Suriname, op de 500m of 600kc". E: "R. Paramaribo Rapar, the voice of Surinam, operating on a freq. of 500m or 6000kc".

STICHTING RADIO OMROEP SURINAME (Gov Comm.)
ADDR: P.O. Box 271, Paramaribo. Te: 98115 – L.P: Gen.Mgr: W.H. Cromwell. Dir. Tec: I. Sorbar.
STATIONS: 750kc 400m 50kW – FM: 93.1Mc 0.01kW.
HOME SCE. in Dutch, Negro English, Hindi, Indonesian: 09.30–03.30. N: Every h on the h.
ANN: "This is SBC, the Surinam Broadc. Corpo. broadc. from Paramaribo, the Capital City" – V. by QSL-card or letter. Recordings accepted – F.PL: Shortwave operation planned for 1967.

R. NICKERIE N.V. (Priv, Comm.)
ADDR: Paramaribo – STATION: 3240kc 92.59m 0.5kW – HOME SCE: 23.00–04.00 – V. by letter. Reports wanted.

RADIKA (Priv.)
ADDR: Paramaribo – STATION: 640kc 468.8m 1kW.

URUGUAY

L.T: GMT – 3 h – Pr. L: Spanish

DIRECCION DE RADIOCOMUNICACIONES, Montevideo.
L.P: Dir. Gen: R. Buoncristiano.

ASOCIACION NACIONAL DE BROADCASTERS URUGUAYOS (ANDEBU)
ADDR: Ca. Yi 1264, Montevideo. Te: 84456. Cable: Andebu – L.P: Pres: Dr. J. Jimenez de Aréchaga. Dir: G. Miguez. Secr: F. Raul Correa.
STATIONS: All st. pr. comm. exc. 7), 33), 34). *=inactive.
Short Waves: Call: CX—. Location: Montevideo exc. where indicated.

	Call	kc	m	kW	Name & h of tr.
1)	A2	6000	50.00	5	R. Sur: 10.00–03.00
2)	A30	6035	49.71	1	R. Nacional: 15.00–03.00
3)	A61	6045*	49.63	1	R. Sport: 10.00–03.00
4)	A53	6055	49.55	5	La Voz de Melo, Melo: 10.00–03.00
5)	A3	6075	49.38	2.5	R. Ariel: 10.00–03.00
6)	A73	6115	49.06	1	R. Clarin: 11.00–02.00
7)	A4	6125	48.98	10	S.O.D.R.E: 13.00–03.10
8)	A20	6140	48.86	10	R. Monte-Carlo: 10.00–03.00
9)	A13	6155*	48.74	10	R. Carve: 13.00–17.00, 21.00–03.00
10)	A21	6170	48.62	1	R. Fenix: 14.00–16.00, 21.00–01.00
11)	A71	9515	31.53	10	R. Sarandí: 15.00–22.00
8)	A72	9595	31.27	10	R. Monte-Carlo: 14.00–19.00
7)	A6	9620	31.19	20	S.O.D.R.E: 13.00–03.10
12)	A7	11735	25.56	5	R. Oriental: 10.00–04.00
3)	A19	11835*	25.35	5	El Espectador: 10.00–03.00
11)	A68	11885	25.24	10	R. Sarandí: 22.00–01.00
7)	A10	11900	25.21	20	S.O.D.R.E: 13.00–03.10
4)	A64	15225	19.70	25	La Voz de Melo
7)	A18	15270	19.65	1	S.O.D.R.E: 12.00–03.10
11)	A60	15385	19.49	10	R. Sarandí: 01.00–08.00

Medium Waves: °=Short Wave.

	Call	kc	kW
13)	CW1	550	4.5
6)	CX58	°580	0.5
14)	CX4	610	5
7)	CX6	°650	50
15)	CW27	680	1/0.25
11)	CX8	°690	10/5
5)	CX10	°730	5/2.5
12)	CX12	°770	25
3)	CX14	°810	25
16)	CW23	820	1/0.5
9)	CX16	°850	50
3)	CX18	°890	10/5
17)	CW17	900	0.25
8)	CX20	°930	18
18)	CX22	970	1
9)	CX24	1010	10
7)	CX26	°1050	20
19)	CX28	1090	15
20)	CW31	1120	2.5
2)	CX30	°1130	10/5
1)	CX32	°1170	10/5
21)	CX33	1200	1
22)	CX34	1210	2
23)	CW35	1240	2.5
24)	CX36	1250	3.1
3)	CW37	1260	1/0.25
7)	CX38	°1290	1
25)	CW39	1320	0.5/0.1
26)	CW133	1330	0.25
10)	CX40	°1330	1
4)	CW53	°1340	2.5/1
27)	CW41	1360	5
28)	CX42	1370	2.5
29)	CW45	1390	0.25
30)	CX140	1400	10/5
31)	CX44	1410	5
32)	CW43	1420	1/0.5
33)	CW25	1430	1
34)	CX46	1450	5/2.5
35)	CW46B	1460	0.25
36)	CW46C	1460	0.03
37)	CX147	1470	1.05
38)	CW43B	1480	1
39)	CX48	1490	2
40)	CW47B	1510	0.1
41)	CX152	1520	2/0.25
42)	CX50	1530	1.25
43)	CV153	1530	1
44)	CX155	1550	0.25
45)	CW51	1560	0.5
46)	CX156	1560	1
47)	CV156	1560	0.7
48)	CW52	1570	0.25
49)	CV157	1570	0.1
50)	CX157	1570	1
51)	CW54	1580	0.25
52)	CV158	1580	0.1
53)	CX159	1590	0.25
54)	CW56	1600	0.25
55)	CV160	1600	0.1
56)	CX160	1600	1

Short Waves:
1) Compañia Uruguaya de Publicidad S.A, Yi 1383, Montevideo. L.P: Dir: J. L. E. Amoroso. CXA32 R. Sur.
2) O.R.O.S.A, Plaza Independencia 846, Montevideo. L.P: Dir: L. Svirski. CXA30 R. Nacional. V. by QSL-card.
3) Difusoras del Uruguay S.A. Soriano 1287, Montevideo. Te: 81481. Cable: Difuruguay. L.P: Dir. Gen: H. Amengual. Dir. Tec: R. Danilo V. D.Prgr: CX18 R. Libertad Sport: 10.00–03.00, CW37 Difusora Rochense, Dr. Julián Graña 119, Rocha: 11.00–24.00. Ann: Transmite CX14 El Espectador, de Montevideo. Uruguay con sus ondas cortas CXA19 y CXA61 en las bandas de 25 y 49 m" – Int-Sig: Vibraphone.

V. by letter. Recordings accepted.
4) Montevideo 721, Melo. L.P: Dir: R. D. Lucas. D.Prgr: CW53 11.00–03.00.
5) Olimar 1472, Montevideo. L.P: Dir: J. U. Pierri. V. by QSL-card.
6) Colonia 1487, Montevideo. Te: 405841. L.P: Dir: Ing. F. D. Toureilles. Dir. Tec: G. Duarte. D.Prgr: N: 11.00, 13.00, 15.00, 17.00, 19.00, 21.00, 23.00, 01.00. Ann: "Transmite CX58 CLARIN, 58 en su dial, y su onda corta CXA73 en la banda de 49 metros, República Oriental del Uruguay". V. by letter.
7) Mercedes 823, Montevideo. Cable: Sodre. L.P: Dir: J. Zavala Carvalho. Dir. Tec: O. F. Chiappe. D.Prgr: On 650/9620/11900: 13.00–03.10. CXA38: 21.00–03.00. N: 13.00, 15.00, 20.00, 24.00, 02.55. Ann: "Servicio Oficial de Difusión R. Electrica Montevideo con sus emisoras". Int-Sig: First movements of "Campo". V. by QSL-card.
8) 18 de Julio 1224, Montevideo. Cable: Montecarlo. L.P: Dir. Gen: D. Romay. Dir. Tec: C. Beisso. D.Prgr: CXA20 930kc: 10.00–03.00. V. by letter. Recordings accepted.
9) Mercedes 973, Montevideo. Te: 983471. Cable: Sadrep. L.P: Dir: Gen: R. Fontaina. Mgr: J. E. de Feo. Dir. Tec: A. Salvo. D.Prgr: 09.00–04.00 (mw). N: 10.00, 14.00, 15.00, 18.00, 19.00, 20.00, 21.00, 22.00, 23.00, 24.00, 01.30. Int-Sig: Gong. V. by letter. Recordings accepted. Rp. CX24: "La Voz del Aire": 10.00–03.00.
10) Rio Branco 1366, Montevideo. L.P: Dir: J. J. Rabassa. D.Prgr: CX40: 10.00–05.00(Sat 06.00).
11) Corporación de Publicidad, S.A, Enriqueta Compte y Rique 1282, Montevideo. Te: 28185. L.P: Dir: M. Vergara. D.Prgr: CX8: 08.00–03.00. N: every h on the h. V. by letter.
12) Olimar 1364, Montevideo. Te: 985183. L.P: Dir. Gen: J. Carlos Shaw. Dir. Tec: A. Razetti. D.Prgr: 10.00–04.00. N: 14.00, 16.00, 20.00, 23.00, 24.00, 01.00, 02.30, 03.30. Portuguese: Mon–Fri 23.10 "Música Brasileña". Ann: "Transmiten CX12 y CXA7, emisoras de R. Oriental de Montevideo, Uruguay. Int-Sig: Vibraphone or Xylophone. V. by QSL-card and letter.

Medium Waves:
13) R. Colonia, Ca. Rivadavia 383, Colonia. L.P: Dir: R. Barreto.
14) R. Rural, 18 de Julio 1513, Montevideo. D.Prgr: 10.00–03.00 (Sat & Sun 06.00). N: every h on the h.
15) R. Tabaré, Uruguay 678, Salto. D.Prgr: 10.00–03.00 – 16) R. Cultural, Lavalleja 42–48, Salto. D.Prgr: 10.00(Sun 10.30)–03.00.
17) R. Frontera, Garzón 428, Artigas – 18) R. Universal, Soriano 1217, Montevideo. D.Prgr: 10.00–03.00(Sat 05.00) – 19) R. Imparcial, Av. Algraciada 1708, Montevideo. D.Prgr: 24 h. V. by QSL-card.
20) R. Salto, Brasil 715, Salto. D.Prgr: 11.00–03.00. V. by letter.
21) Difusora Florida, Gallinal 696, Florida. D.Prgr: 13.00(Sun 12.30)–01.00 – 22) R. Artigas, Av. Millan 2370, Montevideo. D.Prgr: 12.30–02.30 – 23) R. Paysandu, 18 de Julio 1044, Paysandú. D.Prgr: 11.00–03.00 – 24) Broadc. Centenario del Uruguay, Olimar 1364, Montevideo. V. by letter – 25) La Voz de Paysandú, 18 de Julio 614, Paysandú. D.Prgr: 11.00–03.00 – 26) La Voz de Artigas, Artigas – 27) Broadc. San José, Treinta y Tres 890, San José. D.Prgr: 13.00–02.00.
28) R. del Pueblo, Mercedes 1805, Montevideo. D.Prgr: 11.15–03.00.
29) Difusora Treinta y Tres, Pablo Zufriategui 230, Treinta y Tres. D.Prgr: 10.50–03.00.
30) R. Zorilla de San Martin, 18 de Julio 304/10, Tacuarembó.
31) R. Austral, 18 de Julio 965, Montevideo. D.Prgr: 11.55(Sun 08.25) –02.00 – 32) R. Lavalleja, José E. Rodó 530, Minas. D.Prgr 12.55–02.00 – 33) R. Durazno, Ca. Dr. E. Penza 805, Durazno. D.Prgr: 14.00–00.30 – 34) R. America, Plaza Independencia 846, Montevideo. D.Prgr: 13.00 (Sun 12.00)–17.00, 19.00–01.00 – 35) Liceo de Dolores, Liceo de Dolores, Soriano – 36) Liceo de San Carlos, San Carlos, Maldonado. D.Prgr:21.00–24.00 – 37) R. Montevideo, Rio Branco 1366, Montevideo. D.Prgr: 11.00–02.00 38) R. Internacional, Sarandí 792, Rivera. D.Prgr:

09.00–03.00(Sat/Sun 24 h) – 39) **R. Femenina** 18 de Julio 1333 2° piso, Montevideo. **D.Prgr:** 13.00–01.45.
40) **R. Berna**, Nueva Helvecia. **D.Prgr:** 10.00–16.30, 18.00–23.00– 41) **R. Cerro Largo**, Ituzaingo 660, Melo. **D.Prgr:** 09.00–03.00. **V.** by letter.
42) **R. Independencia**, Paysandú 1186, Montevideo. **D.Prgr:** 08.00–03.00. **V.** by letter – 43) **R. Rincón**, Treinta y Tres 3223, Fray Bentos.
44) **R. Carmelo**, 19 de Abril 444, Carmelo. **D.Prgr:** 11.00–03.00.
45) **R. Maldonado**, Isla de Gorriti 819, Maldonado. **D.Prgr:** 11.00–03.00 – 46) **R. Americana**, Trinidad – 47) **R. Vichadero**, Av. Centenario, Vichadero – 48) **R. Litoral**, España 1157, Fray Bentos. **D.Prgr:** 12.00–02.00 – 49) **Difusora del Norte**, Bella Union. **D.Prgr:** *11.00–03.00.*
50) **R. Canelones**, Canelones. **D.Prgr:** 11.30–02.00 – 51) **Emisora del Este**, Domingo Perez 491, Minas. **D.Prgr:** 10.30–02.00 – 52) **R. Rivera**, Monseñor Vera 1132, Rivera. **D.Prgr:** 10.30–17.00, 20.00–00.30.
53) **Emisora Real de San Carlos**, Av. Gral. Flores 468, Colonia. **D.Prgr:** 10.00–03.00 – 54) **Difusora Soriano**, Florida 568, Mercedes. **D.Prgr:** 10.00–03.00 – 55) **R. San Carlos**, Sarandí 774, San Carlos. Maldonado. **D.Prgr:** 10.00–02.00 – 56) **R. Rio Branco'** Rio Branco.

VENEZUELA

L.T: *GMT* – 4 h – **Pr.L:** *Spanish.*
MINISTERIO DE COMUNICACIONES – ADDR: Dirección de Telecomunicaciones, Division de Radiodifusión, Caracas.
CAMARA VENEZOLANA INDUSTRIA RADIO Y TELEVISION – ADDR: Apt. 3155, Caracas. **Cable:** Camradio. **Te:** 425805.

STATIONS: All st's comm. exc. 55) *(Gov)* and 6) *(Educational).*
Short Waves: Call: YV---.

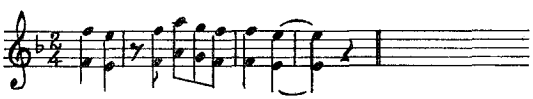
	Call	kc	m	kW	Name	h of tr.
1)	PL	2340	128.4	1	R. Nueva Esparta, Polamar	
2)	PH	2350	127.6	1	R. Guarico, San Juan de los Morros	
3)	QG	2360	127.1	0.5	R. Carúpano	09.00–03.00
4)	QP	2370	126.1	1	R. Puerto La Cruz	
5)	RS	2400	125.0	1	R. Zaraza, Zaraza	
6)	PM	2430	123.5	1	Escuelas Radiofonicas, San Fernando	20.00–01.00
7)	LG	2440	122.9	1	R. Girardot, Maracay	
8)	OX	2450	122.5	1	R. Los Llanos, Calabozo	
9)	NI	2470	121.5	0.2	R. Carorá	11.00–02.00
10)	PD	2480	120.9	1	La Voz del Avila, Caracas	
11)	RV	3205	93.60	1	R. Litoral, Naiguatá	
12)	OE	3215	93.30	1	Ondas Panamericanas, El Vigia	
13)	PP	3235	92.74	1	R. Frontera, San Antônio	
14)	KT	3245	92.45	1	R. Libertador, Caracas	
15)	QL	3255	92.15	1	La Voz del Tigre	11.00–03.00
16)	OC	3265	91.87	1	R. Nirgua	
17)	MC	3275	91.60	1	R. Mara, Maracaibo	10.00–02.30
18)	LE	3285	91.32	1	R. Puerto Cabello	10.00–04.00
19)	OG	3295	91.10	1	R. Trujillo	10.30–02.00
20)	KX	3305	90.77	1	La Voz de la Patria, Caracas	10.00–03.00
21)	LI	3315	90.50	1	R. Maracay	11.00–03.00
22)	RA	3325	90.22	5	R. Monagas, Maturín	10.00–04.00
23)	QC	3335	89.95	1	R. Cumaná	10.00–03.00
24)	PE	3345	89.68	1	R. Central, Maracay	
25)	LC	3355	89.41	1	R. Valencia	10.00–03.00
26)	PM	3365	89.15	1	R. Tovar, Tovar Mérida	09.55–02.00
27)	MI	3375	88.89	0.5	La Voz de la Fé, Maracaibo	20.00–04.00
28)	QI	3385	88.63	1	R. Barcelona	09.00–03.00
29)	OJ	3395	88.37	1	R. Universidad, Mérida	10.00–03.00
30)	KY	4760	63.03	1	Emisora Vargas, La Guaira	10.00–03.00
31)	NW	4770	62.89	1	R. Bolivar, Ci. Bolivar	10.00–03.00
32)	LA	4780	62.76	1	La Voz de Carabobo, Valencia	10.00–03.30
33)	QN	4790	62.63	5	Ondas Porteñas, Pto. La Cruz	10.00–03.00
34)	MS	4800	62.50	10	R. Universo, Barquisimeto	09.58–04.00
35)	ME	4800	62.50	1	Ondas del Lago, Maracaibo	10.00–03.00
36)	MG	4810	62.37	1	R. Popular, Maracaibo	10.00–03.00
37)	RC	4820	62.24	1	La Voz de Apure S. Fernando de Apure	 11.00–02.00
38)	OA	4830	62.11	1	La Voz del Táchira	10.00–04.00
39)	OI	4840	61.98	1	R. Valera	11.00–03.00
40)	KF	4850	61.86	1	Ondas Populares, Caracas	10.00–04.00
41)	QE	4860	61.73	1	R. Mundo, Maracaibo	
42)	KP	4870	61.60	5	R. Tropical, Caracas	
43)	PA	4880	61.48	10	R. Yaracuy, San Felipe	
44)	KB	4890	61.35	5	R. Dif. Venezuela, Caracas	10.00–04.00
45)	NK	4900	61.22	10	R. Juventud, Barquisimeto	10.00–04.00
6)	PN	4910	61.10	10	Esc. Radiofonicas, San Fernando	
46)	KR	4920	60.99	7.5	R. Caracas	*10.00–05.00*
47)	OT	4930	60.85	1	R. Junín, S. Cristóbal	10.00–04.00
48)	MO	4940	60.73	10	R. Lara, Barquisimeto	09.58–04.00
49)	MM	4950	60.60	1	R. Coro	10.00–03.00
50)	QA	4960	60.48	1	R. Sucre, Cumaná	10.00–03.00
51)	LK	4970	60.36	10	R. Rumbos, Caracas	09.00–04.00
52)	OC	4980	60.25	1	Ecos del Torbes, S. Cristóbal	10.00–03.00
53)	MQ	4990	60.12	10	R. Barquisimeto	10.00–04.00
54)	RW	5010	59.88	1	R. Boconó, Boconó	
55)	KO	5020	59.76	10	R. Nacional, Caracas	
56)	KM	5030	59.64	7.5	R. Continente, Caracas	09.30–03.00
57)	QH	5040	59.55	1	R. Maturín	
58)	KD	5050	59.41	2	R. Cultura, Caracas	10.00–03.00
59)	NL	6000	50.00	1	R. Miranda, Los Teques	
60)	NK	6110	49.10	1	R. Cabimas	10.00–03.00
61)	*TE*	*6130*	48.94	*1*	R. *Valles del Tuy, Ocuma del Tuy*	
55)	KG	6170	48.62	10	R. Nacional, Caracas	10.00–04.00
53)	XJ	9510	31.55	10	R. Barquisimeto	10.00–04.00
	MZ	9530	31.48	1	Various tr's, Maracaibo	
	OM	9570	31.55	1	Various tr's, S. Cristóbal	
55)	SC	9640	31.12	10	R. Nacional, Caracas	
49)	PG	9640	31.12	2.5	Ecos del Torbes, S. Cristóbal	10.00–22.00
26)	OS	9750	30.77	1	R. Tovar Mérida	

Medium Waves: Call: YV---; °) also Shortwave.

Call	kc	kW	Call	kc	kW	Call	kc	kW
55) SI	540	50	17) MD	°900	10	86) QD	1150	1
55) SJ	550	10	72) RQ	910	10	87) SD	1160	10
55) KZ	550	1	1) QX	°920	10	88) QV	1170	10
62) LX	560	50	21) LJ	°930	10	57) OR	1180	10
55) SJ	570	50	73) NN	940	10	89) MB	1180	1
27) MJ	°580	10	40) KG	°950	5	90) RE	1190	10
56) KL	°590	20	22) RB	°960	10	10) OZ	°1200	10
63) SF	600	10	13) OO	960	1	91) NH	1200	10
64) NO	610	10	24) LR	°970	10	49) MV	°1210	1
65) SE	620	10	74) ND	980	10	92) QZ	1210	10
55) KA	°630	10	15) MQ	°980	10	37) RD	°1220	10
55) SL	630	10	42) RT	°990	10	93) NT	1230	1
33) QO	°640	10	38) OB	°1000	10	39) OH	°1230	1
7) LH	°650	50	75) NM	1000	10	94) LQ	1240	1
66) NA	660	10	76) PC	1010	10	5) QW	°1250	10
51) LL	°670	50	50) QB	°1020	10	60) ML	°1250	1
31) QF	°680	10	77) MX	1020	10	95) NB	1260	1
53) MR	°690	50	61) TD	°1030	1	16) RY	°1260	1
36) MH	°700	10	78) QY	1030	10	12) OU	°1270	1
20) KY	°710	5	79) ON	1040	10	96) TR	1270	1
23) QR	°720	10	32) LB	°1040	10	97) SG	1280	10
34) MT	°730	10	80) OV	1050	1	18) LF	°1290	1
67) NC	740	10	81) NU	1050	1	98) KH	1300	5
46) KS	°750	10	2) LN	°1060	1	99) NS	1300	1
4) QQ	°760	10	82) OE	1060	10	8) OY	°1330	1
68) KK	770	50	30) KW	1070	1	100) QU	1340	1
52) QD	°780	10	83) NG	°1080	1	101) PF	1360	1
51) KC	°790	5	28) QJ	°1080	10	102) LO	1370	1
69) LP	810	10	43) PB	°1090	10	54) OW	°1380	1
70) SH	820	10	26) OP	°1100	10	103) SS	1400	1
59) LT	°830	10	58) KE	°1100	10	104) NY	1410	1
45) MY	°840	10	3) QT	°1110	10	105) ST	1410	5
25) LD	°850	10	35) MF	°1020	10	19) OF	°1420	1
47) OL	°860	10	11) RU	°1130	1	106) NJ	1430	1
14) KU	*°870*	*5*	*84) PY*	*1130*	*1*	*107) FR*	*1440*	*1*
48) MP	°880	10	9) MU	°1140	10	29) OJ	°1450	1
71) LW	890	10	85) MV	1150	1			

Short Waves:
1) Porlamar – 2) Apt. 25, S. Juan de los Morros. **Te:** 81 – **L.P:** Dir. Gen: J. Ghersi. Dir. Tec: S. Dominguez C.
3) Carupano – 4) Puerto La Cruz – *5)* Zaraza. **L.P:** Dir: C. Vera S – 6) San Fernando – 7) C.A.R. Girardot, Maracay – 8) Calabozo.
9) Ca. Bolivar 58, Carora, Estado Lara. **Te:** 1121. **L.P:** Dir: C. J. Gonzalez. **D.Prgr: N:** 11.00, 16.00, 21.30. **Ann:** "R. Carora YVMU 1140kc onda larga, YVNI 2470kc onda corta transmitiendo desde Carora capital del Distrito Torres, Estado Lara, República de Venezuela, Patria del Libertador". **Int-Sig:** Xylophone. **V.** by letter. Recordings accepted – 10) Caracas.
11) Av. Playa 1, Naiguatá. **L.P:** Dir: L. Landeata L. Dir. Tec: A. Landeata. Dir. Prgr: L. Solorzano F. **D.Prgr:** 07.00–22.00. **N:** 07.00. **Ann:** "Esta Es R. Litoral, Una Emisora al Servicio de Colectividad con sus Estudios Frente al Mar – en su Carro y en su Hogar los 1130 de R. Litoral". **V.** by QSL-card. Recordings accepted. **F.Pl:** Sw to be active soon.
12) El Vigia. **L.P:** Dir: R. Goméz C – 13) San Antonio, Tachira. **L.P:** Dir: R. Carjaval – 14) Palma Miracielos, Edif. "Henry Clay", 2do piso, Caracas – 15) El Tigre (Anzóategui) – 16) Nirgua.
17) Apt. 100, Maracaibo. **L.P:** Dir: L.A. Goveá.
18) Apt. 4, Pto. Cabello. **Te:** 33–88. **L.P:** Dir. Gen: S. Guevara V. Dir. Tec: P.J. Curvelo. **D. Prgr: N:** *11.00, 03.00 and short N every half* h 10.00–04.00. **Ann:** "Esta es R. Puerto Cabello, una emisora al servicio de su región desde Puerto Cabello Venezuela, Patria del Libertador y Pais Democrático de America". **V.** by letter. Recordings accepted. **F.PL:** 10kW.

19) Ca. Independencia 200, Trujillo. **L.P:** Dir: P. J. Torres.
20) C. A. La Voz de la Patria, Caracas. **V.** by letter – 21) Maracay.
22) Apt. 140, Maturín. **Te:** 1001. **L.P:** Dir. Tec: R. Philips. **Ann:** "R. Monagas, YVRB 960kc onda larga, YVRA 3325kc onda corta banda de 90 metros YVRB/FM 88.5Mc". V. by letter. Re. in Sp, E.
23) Apt. 114, Cumaná. **Te:** 2033. **L.P:** Dir: A. J. Istúriz. **D.Prgr: N:** 10.30, 22.00. **Italian Hour:** Sun 23.00–23.30. **Ann:** "Aquí R. Cumaná YVQB 720kc onda larga en Cumaná, Venezuela, Puerta Abierta al Turismo en la America del Sur". V. by letter. Recordings accepted.
24) Maracay – 25) Valencia. **L.P:** Dir: M. Aché.
26) Cra. 4 No. 5–48, Tovar. **Te:** 188255. **L.P:** Dir: A. Sánchez P.
27) Apt. 459, Maracaibo. **Te:** 74764. **L.P:** Dir. Gen: O. Soto L. Dir. Tec: J. Salcedo. Dir. Prgr: J. Soto. **D.Prgr:** 10.00–03.55. V. by letter. Recordings accepted.
28) Apt. 27, Barcelona – 29) Apt. 74, Mérida. **Ann:** "R. Universidad la Emisora de Mérida". V. by letter – 30) La Guaria. **L.P:** Dir: P. Sosa Gusmán.
31) Ca. Dalle Costa 5, Ci. Bolivar. **L.P:** Dir: J. Antonio N. Dir. Tec: J. Bisconti. **D.Prgr: N:** 11.00, 16.30, 02.45 – 32) Valencia. V. by letter.
33) Apt. 4123, Puerto La Cruz. **Te:** 2675. **Cable:** Ondport. **L.P:** Dir. Gen: R. Bellorin M. Dir. Tec: R. Alfonzo. **Ann:** "Transmite Ondas Porteñas y su Gran Circuito Nacional RT, desde Puerto La Cruz, Venezuela, Patria del Libertador y País Democrático de América". V. by letter. Recordings accepted.
34) Apt. 567, Barquisimeto. **L.P:** Dir. Gen: R. Angel S. Dir. Tec: L. M. Pick. **D.Prgr: N:** 16.00, 23.00. V. by letter. Recordings accepted.
35) Apt. 261, Maracaibo. **Te:** 76261. **Cable:** Lagonda. **L.P:** Pres: N. Vale Quintero. St. Mgr: J. Vale Castilla, Dir. Tec: I. Salcedo. **D. Prgr: N:** W 12.00, 17.00, 02.30. Sun 17.30, 24.00. **Ann:** "Desde Maracaibo, Venezuela Patria del Libertador, País Democrático, Transmite Ondas del Lago, Emisoras YVME 1120kc, YVMF 4800kc Onda corta". **Int-Sig:**



V. by QSL-card. Re. in Sp, E.
36) Apt. 347, Maracaibo. **L.P:** Dir: J. Higuera M. V. by QSL-card.
37) Apt. 14, San Fernando Apure.
38) Apt. 37, San Cristóbal. **Te:** 11002. **L.P:** Dir. Gen. & Dir. Tec: J. M. Diaz González. **Ann:** "La Voz del Táchira, YVOB 1000kc Onda Larga, YVOA 4830kc Onda Corta y YVOM 9750kc Banda Internacional de 31 mts; FM 88.3 y 98.3Mc por segundo, desde San Cristóbal, en Venezuela, Patria del Libertador y País Democrático de América". V. by QSL-card or by letter. Re. in Sp, E.
39) Ca. Bolivar 54, Valera. **L.P:** Dir: J. Ferbes J.
40) Edif. R. Centro, Apt. 1364, Caracas. **Te:** 418971. **L.P:** Dir. Tec: R. Girardi P. V. by QSL-card. 41) Maracaibo. **L.P:** Dir: A. J. Istúriz.
42) San Jacinto 9, Caracas. **Ann:** "En cualquier sitio R. Tropical y su gran Circuito Nacional RC". V. by QSL-card.
43) 4a Av. 123, San Felipe. **Te:** 1056. **L.P:** Dir: F. Falkenhagen. **D.Prgr:** 10.50–02.00(Sun 22.30). **N:** 11.00, 17.00, 00.00(Sat 23.30).
44) Cipreses a Miracielos 1, Caracas. **Ann:** "Radiodif. Venezuela – máxima en potencia y calidad – transmitiendo desde Caracas, Venezuela, cuna del Libertador".
45) Apt. 567 y 576, Barquisimeto. **L.P:** Dir. Gen: R. Angel S. Dir. Tec: L. M. Pick. V. by letter. Recordings accepted. **F.PL:** 50kW.
46) Coraven C. A, Barcenas a Rio, Caracas. **Te:** 418971. **Cable:** Coraven. **L.P:** Dir. Gen: A. Espina. **D.Prgr: N:** Every half h. **Ann:** "R. Caracas". V. by QSL-card or letter.
47) Apt. 220, San Cristóbal. **Te:** 11929. **L.P:** Dir: P. Vivas Arellano.
48) Apt. 576, Barquisimeto. **Te:** 20800. **L.P:** see 41. V. by letter.
49) Apt. 7424, Coro. **L.P:** Dir. Gen: R. Leyba. Dir. Tec: V. J. Róca. **Int-Sig:** Opens and closes with the march "Los Tres Colores" and the Nat. Anthem. V. by letter – 50) Apt. 26, Cumaná. V. by letter.
51) Apt. 2618, Caracas. **Te:** 415963. **L.P:** Dir. Gen: F. M. Serrano. Dir. Tec: A. Gulbis. **D.Prgr: N:** 10.00, 15.30, 21.00, 03.30. **Ann:** "Transmite R. Rumbos, La Emisora de Venezuela, Cadena Nacional". V. by QSL-card or letter. Recordings accepted.
52) Apt. 152, San Cristóbal. **Te:** 11680. **Cable:** Ecostorbes. **L.P:** G. Gonzales L. Dir. Tec: E. Marques. **Ann:** "Desde San Cristóbal, Venezuela Patri del Libertador, transmite Ecos del Torbes, su Emisora Predilecta, Estaciones YVOC 4980kc onda corta, 780kc onda larga y YVPG 9640kc banda internacional de 31 metros". V. by letter. Recordings accepted. **F.PL:** 10kW on 4980kc.
53) Apt. 576, Barquisimeto. **L.P:** see 45. **D.Prgr: N:** 11.00, 16.30, 22.00, 02.30, 05.00. V. by QSL-card. Recordings accepted – 54) Bocono.
55) P. O. Box 3979, Caracas. **Te:** 720661. **L.P:** Dir. Gen: Dr. A. Pizani P. Dir. Tec: L. Linares C. Dir. Eng. Prgrs: G. Artiles. **D.Prgr:** YVKZ: 12.00–04.00 – 540kc Maracaibo, 550kc Porlamar, 570kc Ciudad Bolivar, 630kc (KA=Caracas, SL=San Cristóbal), 900kc Mérida – V. by QSL-card.
56) Apt. 866, Caracas. **Te:** 543411. **Cable:** Continente. **L.P:** Pres:. C. W. White. Dir. Tec: J. Périco. Dir. Prgr: H. Requena C. **D.Prgr: N:** 10.00, 15.00, 21.30. **Ann:** "Transmite R. Continente, la primera en sintonía, YVKL onda larga, YVKM onda corta, desde Caracas, Venezuela, cuna del Libertador, país democrático de América. V. by letter. Re. in Sp, E. Recordings accepted.
57) Maturín. **L.P:** Dir: R. Sifontes.
58) Apt. 1931, Caracas. **Te:** 410976. **L.P:** Dir. Gen: I. Neri. **Ann:** "En el año... de nuestra independencia, desde Caracas, Venezuela, Cuna de El Libertador, transmite R. Cultura...". V. by QSL-card. **F.PL:** 20kW tr.
59) Los Teques. **L.P:** Dir: A. Landeata – 60) Ca. Democracia, Cabimas. V. by letter – 61) Ocumare del Tuy.

Medium Waves:
62) **R. La Villa,** Villa de Cure – 63) **R. Caripito,** Apt. 10167, Caripito.
64) **R. Libertad,** Cabimas – 65) **R. Cristal,** Apt. 595, Barquisimeto.
66) **Ondas de los Médanos,** Coro – 67) **R. Mundo,** Av. 25, Maracaibo.
68) **R. Nacional,** Valencia – 69) **R. 810,** Valencia.
70) **R. Guyana,** Upata – 71) **R. América,** Valencia – 72) **R. Aeropuerto,** Maiguetia – 73) **R. Punto Fijo,** Ca. Ecuador, Punto Fijo – 74) **R. Catatumbo,** Maracaibo.
75) **R. Morón,** Morón – 76) **R. Aragua,** Cagua – 77) **R. Calendario,** P.O. Box 789, Maracaibo – 78) **R. Guanara,** Guanara – 79) **R. Los Andes,** Mérida.
80) **R. Perijá,** Machiques – 81) **R. Caroní,** San Felix – 82) **R. San Cristóbal,** Apt. 374, San Cristóbal. V. by letter – 83) **R. Lagunillas,** Lagunillas – 84) **R. Anazonas,** Pto. Ayacucho.
85) **Ondas de Caribe,** Pto. Fijo – 86) **Ecos del Orinoco,** Apt. 47, Ci, Bolivar – 87) **R. Turismo,** Valera – 88) **R. Acarigua,** Acarigua – 89) **La Voz del Zulia,** Maracaibo.
90) **R. Barinas,** Barinas – 91) **Ondas del Escalante,** Sta. Barbara del Zulia – 92) **La Voz de Anaco,** Anaco – 93) **R. Barlavento,** Caucagua.
94) **La Voz de la Victoria,** La Victoria.
95) **La Voz de la Sierra,** Churuguara – 96) **R. Tucupita,** Tucupita.
97) **R. Colonial,** El Tocuyo – 98) **R. Crono Radar,** Av. Gral. Paez, El Paraiso – 99) **R. Reloj,** Maracaibo.
100) **R. San Carlos,** San Carlos – 101) **R. Betijoque,** Betijoque – 102) **R. dif. La Pascua,** Ca. Real 17, Valle de la Pascua – 103) **R. Compás,** El Sobrero – 104) **R. dif. Oriental,** Güria – 105) **R. Turén,** Turén.
106) **R. Progreso,** Bachaquero – 107) **R. Orituco,** Altagracia de Orituco.

CO-OPERATORS & MONITORS

Australia: R. Ronai, P.O. Box E 73, St. James, N.S.W.
Austria: Heinz-Peter Stumvoll, Heindlgasse 4216, 1160 Vienna.
Brazil: Rogaciano de L. C. Filho, 91/1101 Belizario Augusto, Niteroi, R. J.
Chile: Luis del Valle M, Eliecer Parada 1061, Santiago.
Colombia: Italo Amore, Apt. Aéreo 14963, Bogota.
Dominican Republic: see page 303.
Germany: G. G. Thiele, DX-Editor, Deutsche Welle; B. Klink. Gartenstrasse 13a, 4151 Anrath; W. Uthoff, Residenzstrasse 21, 1 Berlin 51; D. Jahn, Wedellstrasse 67, 1 Berlin 46; W. Hess, DX-Editor, R. Berlin International, Nalepastrasse 18–50, 116 Berlin, DDR.
Gt. Britain: M. Barraclough, 34 Brook Park, Briggswath, Whitby, Yorkshire; B. Wildblood, »Snowdonia«, 165 College Road, Owestry, Salop; P. H. Ashcroft, 60 Hencroft Str, Slough, Bucks.
Greece: A. L. Coundakis, 56 Constantinople Str, New Smyrna, Athens.
Haiti: V. Jaar, Box 393, Port-au-Prince.
Holland: M. van Delft, Godfried van Seystlaan 17, Zeist.
Japan: Shinichi Shiraishi, c/o Myojyo Cement Co, Itoigawa City, Niigata.
Korea (Republic): see page 303.
Mali (Republic): see page 303.
New Zealand: Arthur T. Cushen, 212 Earn Str, Invercargill.
Norway: Tore B. Vik, P.O. Box 134, Mysen.
Singapore: Dennis Goh, 11 Jalan Binjai, Singapore 15.
So. Africa: R. Ginbey, 157 Faraday Blvd, Vanderbijl Park, Transvaal.
Sweden: P. Reichel, German Department, R. Sweden, Box 955, Stockholm 1; B. Ericsson, Vallingatan 23C, Borlänge 1; Torbjörn Einarsson, Obbolavägen 58, Umeå.
U.S.A: August Balbi, 3326 Larga Avenue, Los Angeles, Calif 90039; R. Cunningham, 4208 Glenwood Dr, Fort Worth, Texas 76109; Jim Howard, 10 Kenilworth Road, Wellesley, Mass. 02181.

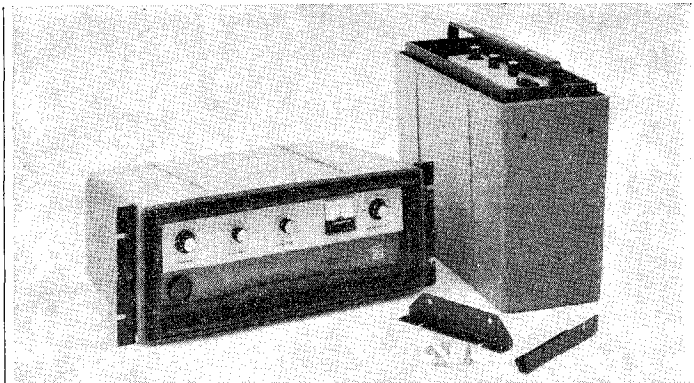
An all-solid-state microwave TV relay progress report

on the air...

KVOS-TV, Bellingham, Wash. • **KEPR-TV,** Pasco, Wash. • **KIMA-TV,** Yakima, Wash. • **KIRO-TV,** Seattle, Wash. • **WEIQ-TV,** Mobile, Ala. • **KMED-TV,** Medford, Ore. • **KQED-TV, ETV,** San Francisco, Cal. • **KVIE-TV, ETV,** Sacramento, Cal. • **KNBC-TV,** Hollywood, Cal. • **KWGN-TV,** Denver, Colo. • **WTWO-TV,** Terre Haute, Ind. • **KOLO-TV,** Reno, Nev. • **WDIQ-TV,** Dosier, Ala. • **KHFI-TV,** Austin, Texas • **WRAL-TV,** Raleigh, N.C. • **WCNY-TV, ETV,** Syracuse, N.Y. • **KOAP-TV, ETV,** Portland, Oregon • **ABC Network,** New York, N.Y. • **CBS Network,** New York, N.Y. • **NBC Network,** New York, N.Y. • **WEDH-TV, ETV,** Hartford, Conn. • **WROH-TV, ETV,** Rochester, N.Y. • **WWTV-TV,** Cadillac, Mich. • **WGEM-TV,** Quincy, Ill. • **WLOS-TV,** Ashville, N.C. • **KTVB,** Boise, Ida. • **WHDO-TV,** Toledo, Ohio • **KTVH-TV,** Wichita, Kan. • **KHET-TV, ETV,** Honolulu, Hawaii • **WITA-TV,** San Juan, P.R. • **CFRN-TV,** Edmonton, Alberta, Canada • **CBC Network,** Montreal, Can. • **CKLW-TV,** Windsor, Ont. • **XEW-TV,** Mexico City, Mex. • **XEIP-TV, ETV,** Mexico City, Mex. • **XET-TV,** Monterrey, Mex. • **TV-2,** Panama City, Panama • **STATE TV of Norway,** Oslo, Norway • **STATE TV of Belgium,** Brussels, Belgium • **STATE TV of Spain,** Madrid, Spain • **NHK Network,** Tokyo, Japan

on the air soon...

KFMB-TV, San Diego, Cal. • **KWTX-TV,** Waco, Texas • **WJCT-TV,** Jacksonville, Florida • **KHTV,** Houston, Texas • **KATV,** Houston, Texas • **KPRL-TV,** St. Louis, Mo. • **KTCA-TV, ETV,** St. Paul, Minn. • **WSCO-TV,** Cincinnati, Ohio • **KTCI-TV, ETV,** St. Paul, Minn. • **WBMO-TV,** Atlanta, Ga. • **WCHS-TV,** Charleston, W. Va. • **WERO-TV,** Pittsburgh, Pa. • **WOR-TV,** New York, N.Y. • **WTIC-TV,** Hartford, Conn. • **WPTZ-TV,** Plattsburgh, N.Y. • **KMVT-TV,** Idaho Falls, Idaho • **YNSA-TV,** Managua, Nic. • **STATE TV of The Netherlands,** The Hague, Netherlands • **STATE TV of Colombia,** Bogota, Col. • **BELO HORIZONTE-TV,** Belo Horizonte, Brazil • **RADIO BANDIRANTES-TV,** Sao Paulo, Brazil • **STATE TV of Eire,** Dublin, Eire



be happy

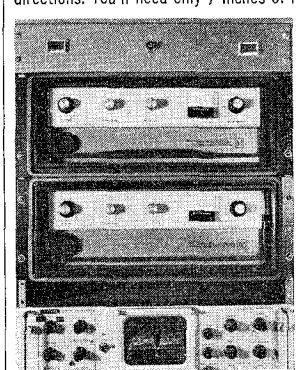
Today Microwave Associates all-solid-state TV relay is one of the most exciting equipment-innovations in the TV broadcast industry. Happy users abound. And for good reasons. It's reliable. Silicon-all-solid-state reliable. No klystrons, no high voltages. No tube failures, aging, or varying modulation sensitivity.

It's versatile. Use it rack-mounted or portable. Transmit high fidelity color over single or dual channels, in single or bi-directional relay. Hot or cold standby protection. 115 volt or 230 volt AC power, 12 or 24 volt DC power.

It's serviceable. Transmitter and receiver are of modular construction, have built-in metering, and all controls are mounted on front. Field experience shows that maintenance costs may be cut by as much as 80%.

The MA-2A and MA-7A relays, ***used as TV pickup,*** *provide versatile, fast reaction capabilities.* Receiver and transmitter include self-contained power supplies, and audio program multiplex. Yet the entire microwave relay link fits into a car, sets up in minutes . . . and you're on the air.

As a rack-mounted STL, use the MA-2A or MA-7A as a single or dual channel relay in one or two directions. You'll need only 7 inches of rack space for each unit. Run it with hot or cold standby.



There's no warm-up time needed, because there's not a single filament or high-voltage power supply in the entire relay system.

For multiple-hop intercity relay, put it on a mountain top . . . And forget it! An 80 ampere-hour watt battery will provide emergency standby power, and the use of *silicon semiconductors assures optimum life and reliability.* Both receiver and transmitter are encased in rugged, weather-resistant aluminum cases, rack or cabinet mounted.

All accessories are available, including tripods, pan heads, 2, 4, 6, 8, and 10 foot dishes, feedline, remote control monitors, automatic switchovers, fault alarm, plus special antennas for mobile van or helicopter use. The MA-2A and MA-7A series relay equipment follows EIA, CCIR, and FCC recommendations for both color and black & white television relay. In addition, complete documented recommendations tailored to your own particular application are available.

Want to be happy too? Write.

Model	*Band MHz*	*Nominal RF Power	Nominal RCVR Noise Figure without *preamp*	Nominal RCVR Noise Figure with *preamp*	*Allocation*
MA-2A	1990-2110	2 watts	10 dB	5 dB	TV Auxiliary broadcast STL, remote TV pickup, intercity relay
MA-7A	6875-7125	.5 watt	12 dB	5.5 dB	TV Auxiliary broadcast STL, remote TV pickup, intercity relay

Also available at other frequencies in the 1300 to 2300 MHz band for international allocation requirements.
*18 watt output TWT amplifiers available.

MICROWAVE ASSOCIATES
Burlington, Massachusetts

Offices: Burlington, Mass.; 9911 Inglewood Ave., Inglewood, Cal. • Hyde House, Edgware Rd., London NW9, England. Subsidiary: Microwave Associates, Ltd., Luton, Beds, England.

CHARACTERISTICS OF TELEVISION SYSTEMS

(As indicated in C.C.I.R. Report 308, Xth Plenary Assembly Geneva, 1963)

System	Number of lines	Channel width Mc	Vision bandwidth Mc	Vision/sound separation Mc	Vestigial side-band Mc	Vision modulation	Sound modulation
A	405	5	3	—3.5	0.75	Pos	AM
B	625	7	5	+5.5	0.75	Nég	FM
C	625	7	5	+5.5	0.75	Pos	AM
D	625	8	6	+6.5	0.75	Nég	FM
E	819	14	10	±11.15	2	Pos	AM
F	819	7	5	+5.5	0.75	Pos	AM
G	625	8	5	+5.5	0.75	Nég	FM
H	625	8	5	+5.5	1.25	Nég	FM
I	625	8	5.5	+6	1.25	Nég	FM
K	625	8	6	+6.5	0.75	Nég	FM
L	625	8	6	+6.5	1.25	Pos	AM
M	525	6	4.2	+4.5	0.75	Nég	FM

Note: For all the stations the field repetition frequency is 50 per second.

United States of America: System M 525 lines.

ch	Mc	ch	Mc	ch	Mc
A-2	55.25/ 59.75	A-6	83.25/ 87.75	A-10	193.25/197.75
A-3	61.25/ 65.75	A-7	175.25/179.75	A-11	199.25/203.75
A-4	67.25/ 71.75	A-8	181.25/185.75	A-12	205.25/209.75
A-5	77.25/ 81.75	A-9	187.25/191.75	A-13	211.25/215.75

United Kingdom (UK): System A 405 lines.

ch	Mc	ch	Mc	ch	Mc
B-1	45.00/ 41.50	B-6	179.75/176.25	B-11	204.75/201.25
B-2	51.75/ 48.25	B-7	184.75/181.25	B-12	209.75/206.25
B-3	56.75/ 53.25	B-8	189.75/186.25	B-13	214.75/211.25
B-4	61.75/ 58.25	B-9	194.75/191.25	B-14	219.75/216.25
B-5	66.75/ 63.25	B-10	199.75/196.25		

Ireland: System I 625 lines & System A 405 lines.

ch	Mc	ch	Mc	ch	Mc
IB	53.75/ 59.75	IF	191.25/197.25	IJ	215.25/221.25
ID	175.25/181.25	IH	207.25/213.25		

Continental Europe (excl. France, Monaco, Italy and OIRT members): System B 625 lines.

ch	Mc	ch	Mc	ch	Mc
E-2	48.25/ 53.75	E-5	175.25/180.75	E-9	203.25/208.75
E-2A	49.75/ 55.25	E-6	182.25/187.75	E-10	210.25/215.75
E-3	55.25/ 60.75	E-7	189.25/194.75	E-11	217.25/222.75
E-4	62.25/ 67.75	E-8	196.25/201.75	E-12	224.75/229.75

France, Monaco: System E 819 lines.

ch	Mc	ch	Mc	ch	Mc
F-2	52.40/ 41.25	F-7	177.15/188.30	F-10	199.70/188.55
F-4	65.55/ 54.40	F-8A	185.25/174.10	F-11	203.45/214.60
F-5	164.00/175.15	F-8	186.55/175.40	F-12	212.85/201.70
F-6	173.40/162.25	F-9	190.30/201.45		

Italy: System B 625 lines.

ch	Mc	ch	Mc	ch	Mc
A	53.75/ 59.25	D	175.25/180.85	G	201.25/206.75
B	62.25/ 67.75	E	183.75/189.25	H	210.25/215.75
C	82.25/ 87.75	F	192.25/197.75	H1	217.25/222.75

USSR and OIRT members (R) (exc. German Democratic Republic): System D 625 lines.

ch	Mc	ch	Mc	ch	Mc
R1	49.75/ 56.25	R5	93.25/ 99.75	R9	199.25/205.75
R2	59.25/ 65.75	R6	175.25/181.75	R10	207.25/213.75
R3	77.25/ 83.75	R7	183.25/189.75	R11	215.25/212.75
R4	85.25/ 91.75	R8	191.25/197.75	R12	223.25/229.75

Morocco: System B 625 lines.

ch	Mc	ch	Mc	ch	Mc
M4	163.25/168.75	M7	187.25/192.75	M9	203.25/208.75
M5	171.25/176.75	M8	195.25/200.75	M10	211.25/216.75
M6	179.25/184.75				

Australia: System B 625 lines.

ch	Mc	ch	Mc	ch	Mc
0	46.25/ 51.75	5	102.25/107.75	8	189.25/194.75
1	57.25/ 62.75	5A	138.25/143.75	9	196.25/201.75
2	64.25/ 69.75	6	175.25/180.75	10	209.25/214.75
3	86.25/ 91.75	7	182.25/187.75	11	216.25/221.75
4	95.25/100.75				

New Zealand (NZ): System B 625 lines.

ch	Mc	ch	Mc	ch	Mc
1	45.25/ 50.75	4	175.25/180.75	7	196.25/201.75
2	55.25/ 60.75	5	182.25/187.75	8	203.25/208.75
3	62.25/ 67.75	6	189.25/194.75	9	210.25/215.75

Japan: System M 525 lines.

ch	Mc	ch	Mc	ch	Mc
J-1	91.25/ 95.75	J-5	177.25/181.75	J-9	199.25/203.75
J-2	97.25/101.75	J-6	183.25/187.75	J-10	205.25/209.75
J-3	103.25/107.75	J-7	189.25/193.75	J-11	211.25/215.75
J-4	171.25/175.75	J-8	193.25/197.75	J-12	217.25/221.75

Television on VHF/UHF (Band IV/V) Europe and Africa.

VHF/UHF television systems for Band IV/V adopted by the European Broadcasting Conference Stockholm 1961 and by the African Broadcasting Conference, Geneva 1963 are 625-lines systems only. These can be grouped into 5 categories, here called Standards G to L:

Standard	Video Band-width (Mc)	Picture/Sound Separation (Mc)	Vestigial Sideband (Mc)	Picture modulation	Sound modulation	Frequency of chrominance subcarrier (Mc)	Powerratio picture/sound
G	5	5.5	0.75	Neg	FM	4.43	5:1
H	5	5.5	1.25	Neg	FM	4.43	5:1
I	5.5	6	1.25	Neg	FM	4.43	5:1
K	6	6.5	0.75	Neg	FM	4.43	5:1
L	6	6.5	1.25	Pos	AM	4.43	8:1

ch	Vision Mc	ch	Vision Mc	ch	Vision Mc	ch	Vision Mc
21	471.25	33	567.25	45	663.25	57	759.25
22	479.25	34	575.25	46	671.25	58	767.25
23	487.25	35	583.25	47	679.25	59	775.25
24	495.25	36	591.25	48	687.25	60	783.25
25	503.25	37	599.25	49	695.25	61	791.25
26	511.25	38	607.25	50	703.25	62	799.25
27	519.25	39	615.25	51	711.25	63	807.25
28	527.25	40	623.25	52	719.25	64	815.25
29	535.25	41	631.25	53	727.25	65	823.25
30	543.25	42	639.25	54	735.25	66	831.25
31	551.25	43	647.25	55	743.25	67	839.25
32	559.25	44	655.25	56	751.25	68	847.25

The sound carrier frequency for each channel can be determined by adding the appropriate figure to the vision carrier frequency given above (5.5Mc for systems G, H; 6Mc for system I and 6.5Mc for systems K, L). In We. Germany ch38 is reserved for aero-navigation.

UHF Channels: USA.

ch	Mc	ch	Mc	ch	Mc
A-14	471.25/475.75	A-38	615.25/619.75	A-62	759.25/763.75
A-15	477.25/481.75	A-39	621.25/625.75	A-63	765.25/769.75
A-16	483.25/487.75	A-40	627.25/631.75	A-64	771.25/775.75
A-17	489.25/493.75	A-41	633.25/637.75	A-65	777.25/781.75
A-18	495.25/499.75	A-42	639.25/643.75	A-66	783.25/787.75
A-19	501.25/505.75	A-43	645.25/649.75	A-67	789.25/793.75
A-20	507.25/511.75	A-44	651.25/655.75	A-68	795.25/799.75
A-21	513.25/517.75	A-45	657.25/661.75	A-69	801.25/805.75
A-22	519.25/523.75	A-46	663.25/667.75	A-70	807.25/811.75
A-23	525.25/529.75	A-47	669.25/673.75	A-71	813.25/817.75
A-24	531.25/535.75	A-48	675.25/679.75	A-72	819.25/823.75
A-25	537.25/541.75	A-49	681.25/685.75	A-73	825.25/829.75
A-26	543.25/547.75	A-50	687.25/691.75	A-74	831.25/835.75
A-27	549.25/553.75	A-51	693.25/697.75	A-75	837.25/841.75
A-28	555.25/559.75	A-52	699.25/703.75	A-76	843.25/847.75
A-29	561.25/565.75	A-53	705.25/709.75	A-77	849.25/853.75
A-30	567.25/571.75	A-54	711.25/715.75	A-78	855.25/859.75
A-31	573.25/577.75	A-55	717.25/721.75	A-79	861.25/865.75
A-32	579.25/583.75	A-56	723.25/727.75	A-80	867.25/871.75
A-33	585.25/589.75	A-57	729.25/733.75	A-81	873.25/877.75
A-34	591.25/595.75	A-58	735.25/739.75	A-82	879.25/883.75
A-35	597.25/601.75	A-59	741.25/745.75	A-83	885.25/889.75
A-36	603.25/607.75	A-60	747.25/751.75		
A-37	609.25/613.75	A-61	753.25/757.75		

UHF Channels: Japan.

ch	Mc	ch	Mc	ch	Mc
45	663.25/667.75	51	699.25/703.75	57	735.25/739.75
46	669.25/673.75	52	705.25/709.75	58	741.25/745.75
47	675.25/679.75	53	711.25/715.75	59	747.25/751.75
48	681.25/685.75	54	717.25/721.75	60	753.25/757.75
49	687.25/691.75	55	723.25/727.75	61	759.25/763.75
50	693.25/697.75	56	729.25/733.75	62	765.25/769.75

EUROPE

ALBANIA

RADIODIFFUSION TELEVISION ALBANAISE

Addr: Rue Ismail Quemal, Tirana. L.P: see radio.
Station: chR2 0.02kW – Exp. tr's three times a week at 18.00–21.00.

AUSTRIA

ÖSTERREICHISCHER RUNDFUNK (Gesellschaft m.b.H.)

Addr: Television Dept, Schellinggasse 4, Wien I. Te: 520636.
Cable: Fernsehen. Studios: Maxingstr. 13a, Wien XIII, Singriener-gasse 21, Wien XII. Columbia-studio, Rothgasse 9, Wien I – L.P: Dir. Gen: J. Scheidl. Dir. TV: G. Freund. Vice Dir. Gen: Dipl. Ing. W. Füchsl.

Stations:	ch	kW(W)		ch	kW(W)
Jauerling I	E2	60/12H	Sonnwendstein	E10	5/1H
Patscherkofel	E4	60/12H	H. Kaibling	E11	10/2H
Kahlenberg I	E5	60/12H	Jauerling II	E21	800/160H
Pfänder	E5	80/16H	Schöckl II	E23	20/4H
Lichtenberg I	E6	100/20H	Kahlenberg II	E24	400/80H
Schöckl	E7	100/20H	Lichtenberg II	E43	800/160H
Gaisberg	E8	100/20H	Gaisberg II	E32	800/160H
Mugel	E9	20/4H	Kahlenberg III	E34	80/16H
Pyramidenkog.	E10	30/6H	+89 low power freq. changers		

D.Prgr: W 17.30–22.00(Sun, Wed, Sat 16.00–22.00), Wed & Fri 10.00–12.00 (for shift workers); Wed, Fri 09.00–10.00 & Thurs 10.00–11.30 for schools. – FI: By licence payments & adv.–TV sets: 770.000.

BELGIUM

RADIODIFFUSION-TELEVISION BELGE (RTB) – BELGISCHE RADIO EN TELEVISIE (BRT) (Gov.)

Addr: RTB or BRT, Place Eugene Flagey 18, Brussels 5. Te: French and Dutch 496050. Cable: RTB or BRT-TV – L.P: Dir. French Prgrs: L. P. Kammans. Dir. Dutch Prgrs: B. Janssens.

French Prgr: Def. 625

Ougrée	chE 3	100/25 kW/H
Wavre	chE 8	100/25 kW/H
Anlier	chE11	10/25 kW/H

+5 satellites.

Dutch Prgr: Def. 625

Wavre	chE10	100/25 kW/H
Aalter	chE2	100/25 kW/H

+2 satellites.

D. Prgr: French: W 17.30–22.00. Sun 14.00–17.45, 19.30–22.30. School Prgr: Mon, Tues, Thurs, Fri 13.15–14.00 – Dutch: 18.00–21.45 (or 22.00). School Prgr: Mon, Tues, Thurs 13.05–14.00.
FI: By state grant in aids – TV sets: 1.543.476 – ALF: Bfrs 840,-

BULGARIA

BULGARIAN TELEVISION (Gov.)

Addr: Todor Strashimirov 2, Sofia. Te: 4-63-21. Cable: TV Bulgar. Telex: 581. L.P: Dir: V. Baev.
Station: Sofia chR7 10/5kW – D.Prgr W exc Tues 16.00–20.30. Sun 15.00–20.30. – TV sets: 185.500.

CZECHOSLOVAKIA

CESKOSLOVENSKA TELEVIZE

Addr: Ceskoslovenská televize, nám M. Gorkého 29, Praha 1. Te: 221247. Cable: Televize. Telex: 0400. L.P: Dir. Gen: J. Pelikán. Techn & Economy Dir: J. Beneš. Dir. For. Rel: L. Kubiček. Dir. Prgr: Z. Noháč. Dir. Telexpart (Selling & Buying films): J. Khun.
Stations: Ch. OIRT. Polarisation: H.

Praha	ch	kW		Jihlava	ch 11	kW 5/1	H
Stredni Cechy	1	30/6	H	**Ostrava**			
Severni Cechy	12	8/1.6	V	Severni Morava	1	10/2	H
Západni Cechy	10	10/2	H	**Bratislava**			1
Jizni Cechy	2	10/2	H	Západni Slovensko	2	10/2	H
Vychodni Cechy	6	10/2	H	Stredni Slovensko	7	10/2	H
Petrin	7	2.5/0.5	H	Vychodni Slovensko	6	10/2	H
Brno							
Jizni Morava	9	10/2	H				

D.Prgr: Mon 16.00–22.00; Tues 07.30–10.45; 15.00–22.30; Wed 08.30–11.00, 14.30–21.45; Thurs 16.30–21.30; Fri 07.00–11.35, 16.25–21.45; Sat 08.00–10.45, 14.00–22.30; Sun 08.15–11.10, 14.00–21.30.
Ad: 20 min's weekly – TV-sets: 2.312.254 – ALF: Czech Crowns: 180,–.

DENMARK

RADIO DENMARK (Gov.)

Addr: Danmarks Radio, TV, Rosenørnsallé 22, Copenhagen V. Te: (01) 350647. Cable: Danradio. Telex: 2695. L.P: Dir. Gen: Erik Carlsen. Dir. Adm: Ejnar Jensen. Dir. Prgr: Jens Fr. Lawaetz. Dir. Tec: (Radio and TV): Fr. Heegaard. Dir. Tec (TV): P. Hansen. Dir. Entertainm: Niels-Jørgen Kaiser. Dir. Actualities dept: Hans Jørgen Jensen. Dir. Cult. dept: L. Bindsløv. Dir. Drama: Felix Nørgaard. Dir. children, youth and educ. broadcasts: Valdemar Christensen.
Stations: ch E, pol H exc those marked *. V.

	ch	kW		ch	kW
Funen	3	10/2	Hobro*	7	0.02
Copenhagen	4	10/2	So. Jutland	7	60/12
Ålborg	5	17/3	Århus	8	10/2
Bornholm	5	10/2	Frederikshavn*	8	0.1
Vejle*	5	0.03	Kolding	9	0.08
Horsens*	6	0.03	Kollund*	9	0.06
Randers*	6	0.01	We. Jutland	10	60/12
Silkeborg*	6	0.1	Skagen	10	0.05
So. Seeland	6	60/12			

D.Prgr: 18.30–21.30. Youth, Educational and childrens prgrs: 08.15–08.40 (Mon, Tues, Fri), 09.15–09.40 (Mon, Thurs), 12.15–12.40 (Wed, Thurs, Fri), 14.15–15.00 (Thurs, Fri), 16.15–17.00 (Tues, Sat) – Fi: By licence payments – TV sets: 1.118.386 – ALF: Kr. 185,–.

FINLAND

OY YLEISRADIO AB (Gov.)

Addr: Prgr. I: Helsinki, Pasila. Te: 418811. Cable: Yletv. Telex: 12849 – Prgr. II: Tampere, Hämeenkatu 22C. Te: 30330. L.P: Head of TV Prgr. I: V. Zilliacus. Dir. of TV Prgr. II: H. Leminen. For other leaders: see radio.
Prgr. 1.

Station	ch	kW	Po		ch	kW	Po
Eurajoki	11	5	H	Oulu	7	60	V
Helsinki	6	10	H	Pihtipudas	10	1.5	H
Helsinki UHF	24	25	H	Pyhävuori	6	20	H
Iisalmi	5	200	V	Rovaniemi	9	700	V
Joutseno	10	10	H	Taivalkoski	2	15	V
Jyväskylä	11	10	H	Tammela	10	8	H
Kajaani	4	15	H	Tammissari	5	150	H
Kerimäki	9	10	H	Tampere	8	80	H
Koli	3	5	H	Tervola	8	20	H
Kuopio	7	45	H	Turku	7	60	H
Lahti	9	40	H	Vaasa	11	100	H
Lapua	5	80	H	Ylivieska	9	60	H
Mikkeli	6	10	V				

+ 22 low power repeaters.
D.Prgr: Mon, Wed 15.15–16.30, 17.30–19.35; Tues 15.15–16.30, 17.00–20.30; Thurs 15.15–16.30, 17.30–19.35, 20.05–21.30; Fri 15.15–17.00, 17.30–19.35; Sat 14.00–17.00, 17.30–19.35, 20.35–22.00; Sun 07.45–09.00, 12.30–14.45, 15.45–16.30, 17.30–19.35.
Prgr. II.

Station	ch	kW	Po	Station	ch	kW	Po
Helsinki	8	10	H	Turku	9	10	V
Tampere	2	10	V	Lahti (UHF)	40	1	H

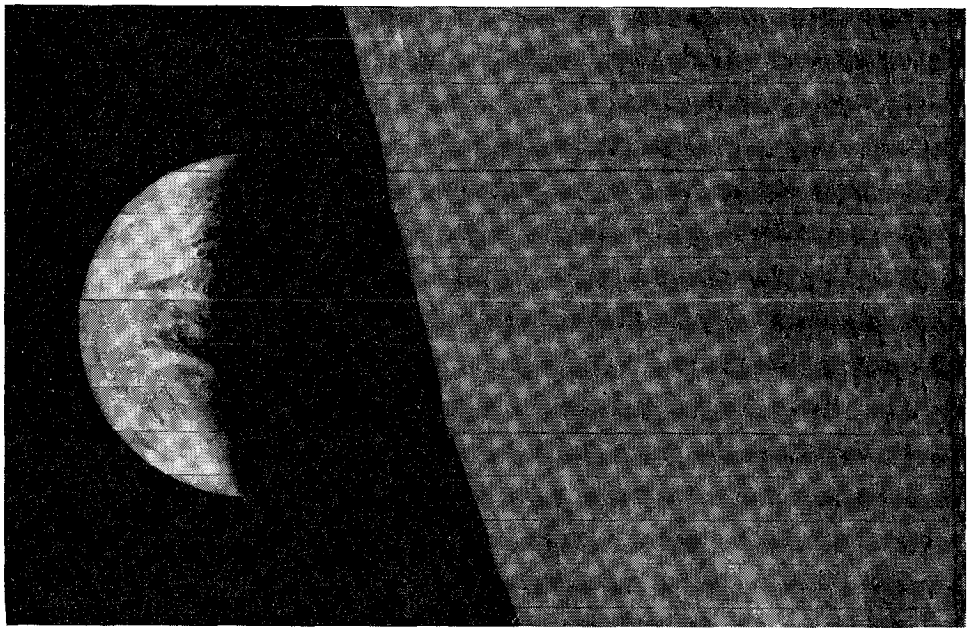
D.Prgr: 16.30–19.35 (Tues 20.35).
Fi: by licence fees & adv – TV sets: 785.787 – ALF: Fmk. 80,–.

FRANCE

OFFICE DE RADIODIFFUSION-TELEVISION FRANÇAISE (Etablissement Public)

Addr: 116, Avenue du President Kennedy, Paris 16 – L.P: Dir. TV: C. Contamine. Dir. Prgr's: G. Neveux.
1st Prgr. (819 lines):
Principal stations: Audio powers 1/4 of Vision powers indicated.

Location	chF	kW (ERP)	Pol.	Location	chF	kW (ERP)	Pol.
Ajaccio	4	0.5	H	Limoges	2	20	H
Amiens	11	20	V	Lyon	12	20	H
Antisanti	6	0.5	H	Marseille	8	20	H
Aurillac	11	0.5	V	Metz	6	10	H
Bastia	2	3	V	Mezieres	8A	0.5	V
Besançon	4	3	V	Montpellier	6	0.05	H
Bordeaux	10	10	H	Mulhouse	8	20	H
Bourges	9	20	H	Nancy	7	0.05	V
Brest	8	10	H	Nantes	4	20	V
Caen	2	20	H	Niort	7	20	V
Carcassonne	4	20	V	Paris	8A	20	H
Cherbourg	12	0.5	H	Perpignan	12	0.05	H
Clermont-Ferrand	6	10	V	Reims	5	10	V
Dijon	10	0.5	V	Rennes	5	20	H
Gex	7	3	V	Rouen	10	10	H
Grenoble	10	0.05	H	Saint-Raphael	6	3	V
Hyeres	4	0.25	V	Strasbourg	5	3	H
Le Havre	7	0.5	H	Toulon	11	0.05	H
Le Mans	12	10	V	Toulouse	10	0.05	H
Lille	8A	20	H	Troyes	5	2	H
				Vannes	2	20	H
					12	0.5	H



Lunar Orbiter photograph of the earth.

How do you fit into the picture?

A communications revolution is changing our picture of earth. Satellites, microwaves, laser beams and other laboratory miracles will soon make possible vast global television networks capable of carrying a live TV signal virtually everywhere on our planet. Space-age technology, wed to television, has already created a new horizon for the international advertiser.

More than 100 nations already have television. Of these, two-thirds have some form of commercial television system. Right now, leading international companies are using television in many nations with amazing success and efficiency.

The story of international television *today* is a story of unlimited opportunity. To help tell it, ABC International is touring a special presentation, "Television In The Space Age—The Challenge of Global Marketing," to key marketing centers around the world. Its message? That the miracle of global TV is with us now. To be used now. In one market or the world over.

ABC International is the hub of the Worldvision network, an association of commercial TV stations in 26 nations serving more than 20 million TV homes. For information on Worldvision—the new dimension in global advertising, phone or write today.

ABC INTERNATIONAL TELEVISION, INC.
1330 Avenue of the Americas
New York, N.Y. 10019
212 LT 1-7777, Cable: AMBROCASTS

RADIOVISION BROADCASTS LTD.
33 Dover Street
London, W.1, England
Mayfair 7494, Cable: FILMADS, PICCY

AMERICAN BROADCASTING COMPANY
Asahi Shimbun Building
Yurakucho, Chiyoda-ku
Tokyo, Japan
211-27796, Cable: AMCOCASTS

Canada, Mexico, Dominican Republic, Guatemala, El Salvador, Honduras, Nicaragua, Costa Rica, Panama, Colombia, Venezuela, Ecuador, Brazil, Argentina, Haiti, Netherlands Antilles, Lebanon, Iran, Nigeria, Japan, Ryukyus, Philippines, Australia, Chile, Bermuda, Korea.

+586 low powered relay st's.
D.Prgr: Sun 08.00–22.30; W 11.30–12.30, 17.25(Thurs 15.00, Sat 16.00)–22.30. School Prgr's: W (approx) 08.30–09.30, 13.05–14.35.
Reg. Prgr's: 18.40–18.55, also Mon, Thurs, Sat 11.00–11.30 & 12.30–13.00.
Second Prgr. (625 lines): Pol=H.
Audio powers 1/8 of vision powers indicated.

Station	ch	kW(ERP)	Station	ch	kW(ERP)
Ajaccio	21	10	Longwy	44	2
Aurillac	65	20	Lyon	58	2
Bastia	47	20	Lyon	40	50
Bayonne	58	5	Marseille	23	50
Besançon	41	10	Metz	34	50
Bordeaux	57	50	Mezieres	23	20
Boulogne	34	2	Mulhouse	21	50
Brest	21	50	Nancy	29	20
Caen	25	50	Nantes	29	50
Carcassonne	58	50	Nice	58	0.45
Chambery	26	10	Niort	22	50
Chamonix	28	2	Paris	22	20
Cherbourg	59	2	Perpignan	25	0.45
Clermont-Ferrand	28	20	Reims	46	50
Dijon	62	50	Rennes	45	50
Epinal	60	2	Rouen	33	2
Gex	21	20	St-Etienne	30	0.45
Grenoble	50	2	St-Raphael	28	20
Hyeres	59	2	Strasbourg	56	50
Le Havre	43	10	Toulon	48	2
Lille	21	50	Toulouse	21	20
Limoges	50	50	Toulouse	39	0.45
			Troyes	24	50
			Vannes	56	20

+10 low powered relay st's.
D.Prgr: Sun 13.45–22.00; Mon–Fri 19.00–21.45; Sat 18.30–23.30.

Experimental Colour broadcasts (SECAM)
Station: Paris ch28 3kW – **D.Prgr's:** D. exc. Fri: 09.00–11.00, 13.00–15.00. Regular tr's from October 1967 – **TV sets:** 6.875.000.

GERMANY

GERMAN FEDERAL REPUBLIC

ARBEITSGEMEINSCHAFT DER ÖFFENTLICH-RECHTLICHEN RUNDFUNKANSTALTEN DER BUNDESREPUBLIK DEUTSCHLAND (ARD)

German Television Prgr. Coordination: 8 München 23, Leopoldstrasse 10. **Te:** 36561. **Telex:** 05-22480 – **L.P:** Prgr. Dir. German Television: L. Hartmann. Deputy Dir: R. E. Lembke. Press: O. Meitzner. Eurovision Office: Dr. R. Dill – Fernsehbeirat: Chmn: H. Müller-Osterode, 3406 Bovenden/Göttingen, Erlenweg 2.
A common prgr. is being broadc. throughout Germany under the title "Deutsches Fernsehen". Each of the organizations participates in the production of this prgr. In addition reg. broadc's are transmitted. *Some stations broadcast a third TV-prgr.*
Community Television Prgr (Deutsches Fernsehen): Mon-Fri 15.40–17.05, 19.00–22.00; Sat 13.00–17.30, 19.00–22.30; Sun 10.00–22.00. Closing times are approx.
Reg. Prgr's: W 17.05(Sat 17.30)–19.00
Third TV Prgr's: Hessischer Rundfunk: Mon-Fri 18.30–21.30; Bayerischer Rundfunk: W 18.00–21.30; Norddeutscher Rundfunk, R. Bremen, Sender Freies Berlin: D. 18.00–21.30 (approx); Westdeutscher Rundfunk: W 12.00–20.30 (approx), Sun 18.00–20.30.
TV sets: 12.295.374 – **ALF:** DM 84.-

BAYERISCHER RUNDFUNK (Anstalt des öffentlichen Rechts)

ADDR: Bayerischer Rundfunk, 8 München 2, Rundfunkplatz 1 – **Studios:** 8 München-Freimann and 8043 Unterföhring – **L.P:** Intendant: Chr. Wallenreiter, Dir. TV: Dr. Cl. Münster. Dir. Stud. Prog: Dr. H. Oeller. Dir. Adm: H. Spies. Dir. Tec: Dr. F. Daser.

Stations	ch	E	kW		ch	E	kW
Grünten	2		100/20H	Wendelstein	10		100/20H
Kreuzberg	3		100/20V	Würzberg	10		2/0.4H
Ochsenkopf	4		100/20V	Hohenpeissenb.	25		10/2H
Dillberg	6		100/20H	Hoher Bogen	55		225/45H
Brotjacklriegel	7		100/10H	Hühnerberg	60		400/80H

+50 low power relay st's
Testtr's: 09.00–11.00, 12.00–15.50. Sat 12.00–15.50.
Third Prgr: W 18.00–21.30.

Stations:	ch	kW(ERP)	Stations:	ch	kW(ERP)
Deggendorf	40	430/80	Spessart	51	250/50
Coburg	41	250/50	Bayreuth	54	100/20
Regensburg	42	370/74	Bamberg	56	90/18
Amberg	43	500/100	München	56	220/44
Augsburg	44	350/70	Landshut	58	55/11
Würzburg	45	500/100	Nürnberg	59	440/88
Grünten	46	500/100	Passau	60	40/8

Pub: "Pressedienst – Studienprogramm" (weekly) – **Fi:** By licence payments – **Ad:** W. max 12 min's.

HESSISCHER RUNDFUNK (Anstalt des öffentlichen Rechts)

ADDR: Postfach 3294, 6000 Frankfurt (Main). – **L.P:** Dir. Prgr: H.O. Grünefeldt. Entertainment: A. Neve. News: W. Hanke. Play: Dr. H. Prescher. Prod: G. Meyer. Afternoon prgr, Youth prgr, adult educ: *J. Göhlen.*
Stations: Feldberg chE8 100/10kW H – Meissner chE7 100/10kW H – Biedenkopf chE2 30/2kW H d – Hardberg chE5 5/0.6kW H d – Rimberg chE57 400/20kW – +50 low power freq. changers.
D.Prgr: 16.00–21.30(Sat also 13.00–16.00, Sun also 10.00–16.00).
Test tr's: W 09.00–11.00, 12.00–15.35 – **Ad:** W between 17.00–19.00
Third Prgr: "Hessisches Fernsehprogramm" Mon-Fri 18.30–21.30 – Tr's (Deutsche Bundespost): Kassel ch42 200/40kW – Feldberg ch54 500/100kW.

RADIO BREMEN (Anstalt des öffentlichen Rechts)

Addr: Heinrich-Hertz Str. 13, Bremen. **L.P:** Dir: H. Abich.
Stations: Bremen chE22 100/20kW H – Bremerhaven chE5 0.16/0.03kW V. **D.Prgr:** D 18.00–21.30. **Reg.Prgr:** W 17.15 (Sat 17.30)–19.00. **Special Prgr:** Mon–Fri 09.00–12.00.
Third Prgr: Bremen chE42 500/100kW H: 18.00–20.30 (approx.)
Fi: By license payments – **Ad:** *D (exc. Sun) max 20 min.*

NDR – TELEVISION

Addr: see radio – **L.P:** Dir. Prgr: D. Schwarzkopf. For other personnel: see radio.

Stations	ch	kW	Pol.		ch	kW	Pol.
Oldenburg/Steink.	2	100	H	Lingen	41	400	H
Flensburg	4	50	H	Dannenberg	43	250	H
Kiel	5	12	H	Bungsberg	50	260	H
Hannover	8	5	H	Osnabrück	50	12.5	H
Hamburg	9	100	H	Aurich	53	230	H
Heide	10	25	V	Oldenburg/Steink.	55	400	H
Harz	10	100	H				

+53 low power freq. changers.
D.Prgr: Test-tr's: W 12.00–15.30(Sat approx. 13.00).
Prgr's: W 09.00–12.00, 15.45–17.05 (Sat 13.00–17.30), D 19.00–20.00 – **Reg. Prgr:** W 17.05(Sat 17.30)–18.59.
Third Prgr: *18.00–20.30*(approx). Common prgr. of Norddeutscher Rundfunk, Radio Bremen & Sender Freies Berlin:
Hamburg ch40 300kW H – Aurich ch43 250kW H – Hannover ch44 500kW H – Höhbeck ch45 440kW H – Schleswig ch45 100kW H – Cuxhaven ch48 330kW H – Torfhaus ch53 500kW H – Kiel ch55 200kW H – Uelzen ch58 500kW H – Göttingen ch59 250kW H – Lingen ch59 500kW H – Niebüll ch60 150kW H.

SAARLÄNDISCHER RUNDFUNK FERNSEHEN

Addr: 66 Saarbrüken, Postfach 1050. **L.P:** Dir: K. Schmelting. Chief Editor: K. H. Reintgen.
Station: Göttelborner Höhe ch2 100/20kW V +12 low powers satellites – **D.Prgr: Reg.Prgr:** Mon-Fri 11.30–12.30, 17.05–18.59. Sat 17.30–18.59 – "Deutsches Fernsehen": 3% annual participation. **Fi:** By license payments and adv – **Ad:** 17.05–18.59.

SENDER FREIES BERLIN

Addr: Fernsehen, Masurenallee 8/14, 1 Berlin 19. **Te:** 30331. **Cable:** Sender Freies Berlin – **L.P:** see Radio – **Station:** Berlin chE7 100/10kW.
D.Prgr: W 09.00–13.30, 15.40–17.05 (Sat 12.55–17.30), 19.00–22.00 (approx). Sun 09.00–09.50, 11.00–17.00, 19.00–22.00(approx). **Reg. Prgr's:** Mon–Fri 15.00–15.30, 17.05–19.00, Sat 08.00–08.45, 12.00–12.30, 17.30–19.00.
Third Prgr (NDR/RB/SFB): 18.00–20.45(approx).
Station: Berlin ch39 500/20kW H – *Fi: By license payments.*

SÜDDEUTSCHER RUNDFUNK FERNSEHEN

(Anstalt des öffentlichen Rechts)

Stations	ch	kW(ERP)			ch	kW(ERP)	
Heidelberg I	7	100/20kW	V	Stuttgart	11	100/20kW	H
Aalen	8	50/4kW	V	Heidelberg II	50	500/100kW	H
Waldenburg	9	100/20kW	H				

+35 low power freq. changers.
D.Prgrs: W 16.00–17.05, 19.00–21.30(approx.), Sat 14.00–17.05 19.00–22.00(approx). Sun 10.00–22.00(approx) – **Reg.Prgr:** Mon–Fri 17.05–19.00 – **Ad:** W 17.20(Sat 17.30)–17.50, 18.20–19.00. **Testprgrs:** W 09.00–11.00 and 12.00 to start of Prgr's.

SÜDWESTFUNK (Anstalt des öffentlichen Rechts)

Addr: Südwestfunk Fernsehen, 7570 Baden-Baden, Hans-Bredow-Str. **Te:** 761. **Cable:** Südwestfunk Baden-Baden – **L.P:** see radio.

Stations:	chE	kW(ERP)	Pol	Stations:	chE	kW(ERP)	Pol
Raichberg	4	40/8	H	Haardtkopf	25	200/40	H
Koblenz	6	50/10	H	Wannenberg	30	5/1	H
Weinbiet	6	30/6	H	Saarburg	31	20/4	H
Feldberg i Schw.	8	100/20	H	Grünten	43	500/100	H
Hornisgrinde	9	100/15	H	Marienberg	47	50/10	H
Donnersberg	10	100/20	H	Brandenkopf	48	2.5/0.5	H
Eifel	23	20/4	H				

+180 low power satellites – **D.Prgr:** Variable. **Reg.Prgr:** Mon–Fri 17.40–18.05, 18.54–18.59.

Fi: By license payments – Ad: Mon–Fri 17.05–17.40, 18.05–18.54; Sat 17.30–17.40, 18.05–18.54.

WDR FERNSEHEN

Addr: Wallrafplatz 5, Köln. **Te:** 20701. **Cable:** WDR. **Studios:** 53 Bonn, Dahlmannstr. 14; 4 Düsseldorf, Achenbachstr. 5 – **L.P:** Dir: Dr. Hans-Joachim Lange. Dir. Third Prgr. TV: W. Höfer.
First TV-Programme: Pol: H.

Stations:	ch	E kW(ERP)		ch	E kW(ERP)
Aachen	24	200/40	Münster	32	500/100
Bonn	5	0.5/0.1	Nordhelle	30	240/48
Kleve	46	100/20	Teutob. Wald	11	100/20
Köln	11	10/2	Wuppertal	6	0.6/0.12
Langenberg	9	100/20	plus 171 low power freq. changers.		

D.Prgr: Testtr: W 09.00–11.00, 12.00–17.00(Sat 13.00).
Reg. Prgr: W 17.30–18.15 (Sat also 13.00–13.30).
Common Prgr: W 16.00–17.00 (Sat 13.30–17.25), 19.00–at least 21.00. Sun 09.30–at least 21.00 – **Ad:** W 18.15–19.00.

Third Prgr: D 13.00–14.00, 19.00–21.00 (approx.)

Stations:	chE	kW(ERP)		Stations:	chE	kW(ERP)	
Wuppertal	42	85/17	H	Dortmund	53	500/100	H
Münster	45	250/50	H	Düsseldorf	55	500/100	H
Bonn	49	100/20	H	Aachen	58	500/100	H
Monschau	50	330/66	H				

ZWEITES DEUTSCHES FERNSEHEN

(Anstalt des öffentlichen Rechts)
(All prgrs are broadc. simultaneously on the stations listed below and originated at the main studios in Mainz).
Addr: Mainz, Postfach 343. **Te:** 2051. **Telex:** 04-187661 – **L.P:** Dir. Gen: Prof. Dr. K. Holzamer. Dir. Prgr: J. Viehöver. Dir. Inf: W. Dietrich. Dir. Adm: Dr. F. Huch. Dir. Tec: R. Kaiser. Dir. Foreign Relations: E. P. Braun. Film Buyers: K. Brüne, H. Blank.
Stations: chE. Pol: H.

	ch	kW(ERP)		ch	kW(ERP)
Aachen	37	500/100	Höhbeck	21	500/100
Ahrweiler	33	500/50	Hoher Bogen	28	500/100
Amberg	37	500/100	Kaiserslautern	22	25/5
Augsburg	23	500/100	Kassel	35	100/20
Baden/Baden	31	330/66	Kiel	35	100/20
Bayreuth	30	100/20	Koblenz	31	100/20
Bamberg	24	100/20	Landshut	39	200/40
Berlin	33	500/100	Lingen	24	500/100
Bielefeld	33	500/100	Marienberg	21	500/100
Bonn	26	100/20	Minden-Westf.	26	330/66
Boppard	28	250/50	Monschau	21	330/66
Brandenkopf	28	100/20	München	35	250/50
Bremen	32	500/100	Münster	21	50/10
Coburg	22	250/50	Niebüll	34	200/40
Cuxhaven	24	330/66	Nürnberg	34	250/50
Deggendorf	33	250/50	Ostfriesland	33	250/50
Donaueschingen	22	100/20	Passau	30	50/10
Donnersberg	37	330/66	Pforzheim	34	250/50
Dortmund	25	500/100	Ravensburg	37	500/100
Düsseldorf	29	500/100	Regensburg	21	500/100
Eiderstedt	31	500/100	Rhön	29	500/100
Eutin	21	500/100	Rimberg	25	500/100
Feldberg/Ts.	34	500/100	Rottwell	35	330/66
Flensburg	39	500/100	Saarbrücken	32	330/66
Freiburg/Breeigau	33	500/100	Schleswig	26	100/20
Grünten	28	500/100	Schnaitsee	26	250/50
Göttingen	21	250/50	Spessart	35	250/50
Haardtkopf	35	400/80	Stuttgart	26	300/60
Hamburg	30	500/100	Torfhaus	23	500/100
Hannover	24	500/100	Trier	37	50/10
Heidelberg	27	500/100	Uelzen	27	500/100
Heubach	29	250/50	Ulm	33	500/100
Hochrhein	39	250/50	Würzburg	25	500/100
Hof	23	500/100	Wuppertal	22	100/20
Hesselberg	32	100/20			
Hohes Lohr	22	250/50			

D.Prgr: Test tr's: W 10.00(Wed 13.00) until start of prgr.
Common Prgr: Mon–Fri 17.10–22.00, Sat 13.40–24.00, Sun 11.40–22.00. Sport on Sat & Sun afternoons. Closing times are approx.
Fi: By license payments.

GERMANY

GERMAN DEMOCRATIC REPUBLIC
DEUTSCHER FERNSEHFUNK (Gov.)

Addr: Berlin-Adlershof, Rudower Chausse 3-5. **Te:** 63269. **Cable:** Fernsehfunk Berlin – **L.P:** Intendant: H. Adameck, Programm Leitung: D. Schmotz, Sendeleitung: M. Weigand. Leiter der Internationalen Verbindungen: Dr. K. Ottersberg
Stations: Helpterberg chE3 V – Cottbus chE4 H – Berlin/Inselsberg chE5 H – Brocken chE6 H – Görlitz chE6 V – Schöneck chE6 V – Eisenhüttenstadt chE7 H – Karl-Marx-Stadt chE8 H – Lobenstein chE7 V – Rhinov chE9 H – Leipzig chE9 V – Dresden chE10 V – Schwerin chE11 H – Frankfurt/Oder chE11 H – Blessberg chE12 H – Dequede chE31 H – Berlin chE27 H – Blessberg chE31 H – Inselsberg chE31 H – Marlow chE8 H – Wittenberg chE11 V
D.Prgr: Mon-Fri 08.50–13.00, 17.00–22.00; Sat 08.50–23.00; Sun 08.50–22.00 – **Ad:** Three times weekly after 18.00 – **TV sets:** 3.384.649.

GIBRALTAR

GIBRALTAR TELEVISION (Comm.)

Addr: TV House, Wellington Front, Gibraltar. Studios: TV House, Queensway, Gibraltar. **Te:** 4671/2. **Cable:** Broadcasts. **L.P:** see radio – **Station:** chE6 200/50kW H – **D.Prgr:** 18.30–23.00 – **TV sets:** 5500 – **ALF:** £ 3–0–0.

GREAT BRITAIN

BRITISH BROADCASTING CORPORATION

The BBC's Television Service is an integral part of the British Broadcasting Corporation – **Addr:** Broadc. House, London W.1 – **L.P:** Dir. TV: K. Adam, C.B.E. Contr. of Prgr's: H. Wheldon, O.B.E, M.C. Contr. BBC-1: I. M. Peacock. Contr. BBC-2: D. Attenborough. Contr. Prgr. Sce's: I. Atkins, O.B.E. Contr. TV Adm: S. G. Williams, O.B.E. Gen. Mgr: TV Enterprises: D. G. Scuse. M.B, E. Chief Eng: T. H. Bridgewater O.B.E.
BBC-1 (405 lines, VHF) *=directional aerial.

Stations:	ch	kW (ERP)	Pol.	Stations:	ch	kW (ERP)	Pol.
Crystal Palace	1	200	V	Sandale	4	30*	H
Ashkirk	1	18*	V	Sandale	6	70*	H
Divis	1	35	H	Melvaig	4	25*	V
Redruth	1	10*	H	Meldrum	4	17*	H
Thrumster	1	7*	V	Manningtree	4	5*	H
Llanddona	1	6*	V	Haverfordwest	4	10*	H
Llandrindod Wells	1	1.5	H	Les Platons	4	1	H
Holme Moss	2	100	V	Wenvoe	5	100	V
Rosemarkie	2	20*	H	Wenvoe	13	200*	V
No. Hessary Tor	2	15*	V	Orkney	5	15*	V
Swingate	2	1.5*	V	Pontop Pike	5	17	H
Londonderry	2	1.5*	H	Forfar	5	5*	V
Kirk o'Shotts	3	100	V	Br. Mountain	5	7*	V
Rowridge	3	100*	V	Douglas	5	3*	V
Tacolneston	3	45*	H	Fort William	5	1.5	H
Skriaig	3	12*	H	Peterborough	5	1	H
Bressay	3	6*	V	Moel-y-parc	6	20*	V
Morecambe Bay	3	5*	H	Winter Hill	12	125*	V
Blaen-plwyf	3	3*	H	Belmont	13	50*	V
Sutton Coldfield	4	100	V				

+=32 low power satellites.
D.Prgr: All stations: Trade Test tr's: Mon–Sat 09.00–13.00. Prgr. (hours approx): Mon–Fri 10.00–12.00, 14.00–14.40. For Schools (during term-time) 09.10–12.00, 14.00–16.30; 17.00–23.05. Sat 13.45–23.00. Sun 14.00–18.15, 19.00–23.00.
BBC-2 (625 lines, UHF)

Stations:	ch	kW (ERP)	Pol.	Stations:	ch	kW (ERP)	Pol.
Rowridge	24	500	H	Emley Moor	51	1000	H
Belmont	28	500	H	Wenvoe	51	500	H
Crystal Palace	33	500	H	Winter Hill	62	500	H
Sutton Coldfield	40	1000	H	Reigate	63		V
Tunbridge Wells	44		V	Reigate	63		V
Black Hill	46	500	H	Pontop Pike	64	500	H
Guildford	46		V	Hertford	64		V

F.PL: The BBC anticipates that it will introduce colour television broadc. by Oct. 1967.
TV sets: 13.750.000 **ALF:** £ 5-0-0.

INDEPENDENT TELEVISION AUTHORITY (I.T.A.) Comm.

Addr: 70 Brompton Rd, London, S.W. 3. **Te:** KNightsbridge 7011 – **L.P:** Chmn: The Rt. Hon. Lord Hill of Luton, P. C. Dir. Gen: Sir Robert Fraser, O.B.E.

Stations: chB	ch	Po.	kW(ERP)	Area served
Croydon	9	V	400	London
Lichfield	8	V	400	Midlands area
Membury	12	H	30	Midlands area
Scarborough	6	H	1	Norths area
Winter Hill	9	V	100	Norths area
Emley Moor	10	V	200	Norths area
Black Hill	10	V	475	C. Scotland
St. Hilary	10	V	200	So. Wales, We. England
Chillerton Down	11	V	100	So. England
Dover	10	V	100	So. England
Burnhope	8	H	100	No. Ea. England
Mendlesham	11	H	200	Ea. England
Sandy Heath	6	H	30	Ea. England

Stations: chB	ch	Po.	kW(ERP)	Area served
Belmont	7	V	20	Ea. England
Black Mountain	9	H	100	No. Ireland
Strabane	8	V	100	No. Ireland
Stockland Hill	9	V	100	So. We. England
Caradon Hill	12	V	200	So. We. England
Caldbeck	11	H	100	The Borders
Selkirk	13	V	25	The Borders
Richmond Hill	8	H	10	The Borders
Durris	9	H	400	No. Ea. Scotland
Mounteagle	12	H	50	No. Ea. Scotland
Rumster Forest	8	V	30	No. Ea. Scotland
Angus	11	V	50	No. Ea. Scotland
Fremont Point	9	H	10	Channel Islands
Presely	8	H	100	Wales
Arfon	10	H	10	Wales
Moel-y-parc	11	V	25	Wales
St. Hilary-Down	7	V	100	Wales

D.Prgr: Trade transm: W 09.30– undtil 15 mins. before prgr. For schools (during term time) Mon–Fri 11.00–12.00, 14.00–15.00. **Prgr's:** Mon–Fri 14.45–23.45, Sat 12.00–24.00, Sun 11.00–24.00.
Fi: Prgr. contractors financed solely from adv. revenue. I.T.A. financed solely from rentals paid by contractors. **Ad:** 6 mins. per h averaged over the day. Max. in any 1 h 7 mins.
Independent Television News Ltd, TV House, Kingsway, London, W.C. 2. **L.P:** Chief Executive: Editor G. Cox. Gen. Mgr: W. Hodgson. Film Buyer: H. Whitcomb – Provides the main news bulletins for all ITA Areas – **Independent Television Companies Association,** Knighton House, 52 Mortimer Street, London, W.1 – **L.P:** Chmn: C. D. Wilson – The Association acts on behalf of all prgr. companies on certain matters of common interest.
Prgr Companies:
ABC Television Ltd, TV House, Mount Street, Manchester 2. **Te:** Deansgate 4597. **L.P:** Man. Dir: H. Thomas. Film Buyer: R. H. Norris – **Anglia Television Ltd,** Anglia House, Norwich. **Te:** 28366. **ATV Network Ltd,** ATV House, 17 Gt. Cumberland Place, London W.1. **Te:** Ambassador 8040 – ***Border Television Ltd,*** *The Television* Centre, Carlisle. **Te:** Carlisle 25101. **L.P:** Man. Dir: J. Bredin. Sales Contr: B. Blyth – **Channel Islands Communications** (Television) **Ltd,** The Television Centre, Rouge Bouillon, St. Helier, Jersey, C.1. **Te:** 23451. **L.P:** Man. Dir: K. A. Killip – **Grampian Television Ltd,** Queen's Cross, Aberdeen. **Te:** Aberdeen 53553. **L.P:** Man. Dir: G. E. Ward Thomas. Film Buyer: A. Elkins – **Granada Television Ltd,** Granada TV Centre, Quay Street, Manchester 3. **Te:** Deansgate 7211. **L.P:** Man. Dir: C. G. Bernstein – **Rediff. Television Ltd,** TV-House, Kingsway, London, W.C.2. **Te:** Holborn 7888. **L.P:** Gen. Mgr: J. McMillan – **Scottish Television Ltd,** Theatre Royal, Hope Street, Glasgow, C.2. **Te:** Douglas 9999 – **L.P:** Man. Dir's: H. N. C. Stevenson, W. Brown – **Southern Television Ltd,** Southern Independent Television Centre, Northam, Southampton. **Te:** 28582. **L.P:** Man. Dir: C. D. Wilson – **TWW Ltd,** Pontcanna Studios, Cardiff. **Te:** 26633 – **L.P:** Man. Dir: J. Baxter – **Tyne Tees Television Ltd,** Television Centre, City Road, Newcastle upon Tyne. **Te:** 610181. **L.P:** Man. Dir: J. A. Jelly – **Ulster Television Ltd,** Havelock House, Ormeau Road, Belfast 7. **Te:** 28122. **L.P:** Man. Dir: R. B. Henderson – **Westward Television Ltd,** Derry's Cross, Plymouth. **Te:** 69311. **L.P:** Man. Dir: P. Cadbury.

GREECE

NATIONAL HELLENIC BROADCASTING INSTITUTE

Addr: Mourouzi Str. 16, Athens 138 – **L.P:** see radio – **Station:** Athens chE5 0.1kW – **D.Prgr:** Experimental tr's: 16.30–approx 18.30.

FORCES TV STATION

Addr: Army Geographical Service, Pedion Areos, Athens – **Station:** chE10 0.5kW – **D.Prgr:** Experimental tr's (irr): 17.00–approx 19.00. **TV sets:** 17.000

HOLLAND

NEDERLANDSE TELEVISIE STICHTING (N.T.S.)

Addr: P.O. Box 10, Hilversum. **Te:** 02950/16851. **Cable:** Televisie – The Dutch prgr's are provided by the N.T.S. and the broadc. societies as mentioned under radio – **Board of the N.T.S.:** Chmn: E. A. Schüttenhelm. Vice Chmn: H. W. van Doorn L.L.D. Secr: Ch. E. van der Ploeg.
Prgr. I (Pol: H):
Stations: Lopik chE4 100/20kW – Roermond chE5 50/10kW – Smilde chE6 40/8kW – Goes chE7 5/1kW+chE29 125/25kW – Markelo chE7 30/6kW – Den Helder chE10 1/0.2kW – Wieringen chE39 300/60kW.
D.Prgr: Sun 14.30–16.00, 18.00–21.30; Mon 18.00–21.30; Tues 18.00–21.40; Wed 16.00–16.55, 18.00–21.40; Thurs, Fri 18.00–21.45; Sat 15.00–16.45, 18.00–21.50.
Prgr. II: (Pol: H): Lopik chE27 1000/200kW – Roermond chE31 500/100kW – Smilde chE47 1000/200kW – Goes chE32 125/25kW – Markelo chE54 300/60kW.
D.Prgr: 19.00(Sun 18.30)–21.10(Tues 21.50).
Adult Education (in cooperation with the foundation "Teleac"): Prgr. I: Tues, Thurs 22.00–22.30, Wed 17.30–18.00, Fri 11.00–11.30 (repeat); Prgr. II: Mon, Fri 21.30–22.00.
School TV (in cooperation with the foundation N.O.T.): Prgr. I: Tues, Fri(repeat) 09.20–11.00.
Ads will be permitted to a maximum of 15 min's daily as per Jan. 2nd 1967 – **TV sets:** 2.297.352 – **ALF:** Dfl 36,-.

TECHNICAL UNIVERSITY DELFT

The exp. colour-tr. at the Technical University in Delft, constructed by staff and students, is testing at irr. times at a strict educational level when this needed in the studyscheme, in order to acquaint the students with various techniques. **Addr:** Technische Hogeschool, Lab. voor Elektronica, Afdeling der Elektrotechniek, Kanaalweg 2b, Delft. **L.P:** Ir. F. G. S. Huigen, Ir. D. Ch. van Maaren, K. Hoen, F. L. W Dijstelbergen – **Station:** chE30 600/120W.

PHILIPS: *Eindhoven: Exp. colour tr:* chE60 30/6kW: *One evening* monthly: 18.30–19.30. The prgr's are provided by the different broadc. societies.

HUNGARY

MAGYAR RADIO ES TELEVIZIO (Gov.)

Addr: Television Direction, C. Szabadsagter 17, Budapest. **Te:** 113–200 **L.P:** Dir. Gen: F. Gódor. Dir. F. Kulcsár. Dir. Tec: R. Kerpei.

Stations:	ch	kW			ch	kW	
Budapest I	R1	30/10	H	Miskolc	R9	0.05/0.025	H
Pécs	R2	1/0.4	H	Sopron	R9	0.05/0.025	V
Tokaj	R4	1/0.25	H	Szentes	R11	20/4	H
Kékes	R8	4/0.8	H	Kabhegy	R12	20/4	H

D.Prgr: Tues, Wed, Thurs, Sat: 17.00–22.00, Sun 09.00–11.00, 15.00–22.00 – **TV sets:** 934.057.

ICELAND

RIKISUTVARPID TELEVISION (Gov.)

Addr: Laugavegur 176, Reykjavik. **Te:** 3-64-85. **Cable:** Isvision. **L.P:** Dir. Gen: V. Th. Gislason. Dir. TV: P. Gudfinnsson. Dir. Tec: J. D. Thorsteinsson. Dir. N: E. Björnsson – **Station:** Reykjavik (Vatnsendi) chE10 1/0.2kW H. **D.Prgr:** Sun 16.00–17.30, 20.00–23.00; Mon, Fri 20.00–23.00; Tues 20.00–22.30; Wed 17.30–18.30, 20.00–22.00; Sat 16.00–18.00, 20.00–22.30. Thurs no prgr – **TV sets:** 12.000.

IRELAND

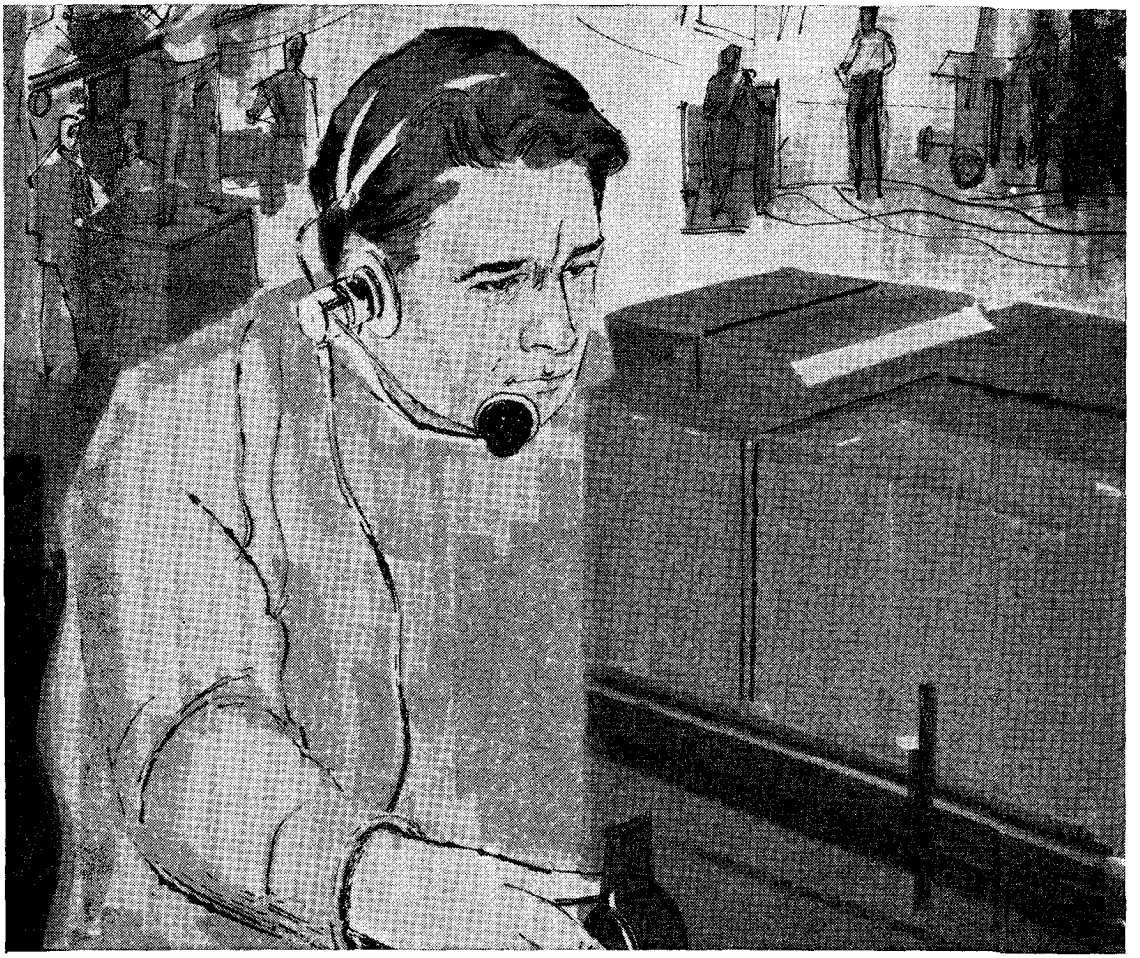
RADIO TELEFIS EIREANN (Statutory Corporation)

Addr: Donnybrook, Dublin 4. **Te:** 693111. **L.P:** Contr. of Prgr's: G. Rugheimer. For. other personnel: see radio.
Stations: [1]System I (625 lines). [2]System A (405 lines).
Mt. Kippure[2] ch B7 100/25kW H – Truskmore[2] ch B11 100/20kW V – Kippure[1] ch IH 100/20kW H – Maghera[1] ch IB 80/16kW H – Mt. Leinster[1] ch IF 100/20kW V – Mullaghanish[1] ch ID 100/20kW V – Truskmore[1] ch IJ 100/20kW V + 8 low power relay st's.
D.Prgr: 17.30–23.15. **Fi:** By licence payments & adv. **Ad:** 10% of prgr. hrs. **TV sets:** 302.000. **ALF:** £ 5–0–0.

ITALY

RADIOTELEVISIONE ITALIANA

The television Sce is an integral part of the Radiotelevisione Italiana – **Addr:** Direzione Centrale TV, Via del Babuino 9, Roma. **L.P:** Dir. Prgr: Dr. L. Beretta. Dir. Tec: Eng. G. Orsini. For other personnel: see radio.
NATIONAL PRGR. STATIONS:
Piemonte: Torino (C-o) 16/3.2kW+42 satellites.
Valle D'Aosta: 11 satellites.
Lombardia: Milano (G-o) 24/4.8kW – M. Penice (B-o) 100/20kW + 42 satellites.
Trentino-Alto Adige: Paganella (G-o) 1.33/0.266kW + 53 satellites.
Veneto: M. Venda (D-o) 100/20kW + 44 satellites.
Friuli-Venezia Giulia: Trieste (G-o) 1.4/0.28kW – Udine (F-o) 2/0.4kW + 24 satellites.
Liguria: Portofino (H-o) 127/25.4kW + 34 satellites.
Emilia-Romagna: 39 satellites.
Toscana: M. Argentario (E-o) 2.5/0.5kW – M. Serra (D-o) 270/54kW + 51 satellites.
Marche: M. Conero (E-o) 24/4.8kW – M. Nerone (A-o) 34/6.8kW + 31 satellites.
Umbria: M. Peglia (H-o) 32/6.4kW + 12 satellites.
Lazio: M. Favone (H-o) 0.9/0.18kW – Roma (G-o) 36/7.2kW + 39 satellites.
Abruzzo: Pescara (F-o) 1/0.2kW + 34 satellites.
Molise: 9 satellites.



In broadcasting...

EMITELEVISION
looks forward to the future

EMITELEVISION plans, produces and installs complete television systems; everything from camera to aerial. Millions of viewers obtain better pictures from **EMI**TELEVISION aerials; much of the sound they hear is recorded on **EMI**TELEVISION professional tape recorders.

New **EMI**TELEVISION colour cameras are the most advanced of their kind, and thinking way ahead, are research teams, headed by some of the great names in broadcasting, dedicated to changing the whole pattern of television.

That is why **EMI**TELEVISION looks forward to the future.

EMI

EMI ELECTRONICS LTD · BROADCAST EQUIPMENT DIVISION · HAYES · MIDDX · ENGLAND · TEL: HAYES 3888 · CABLES: EMIDATA LONDON · TELEX 22417

EE 3840

Campania: M. Faito (B-o) 40/0.8kW – M. Vergine (D-o) 1/0.2kW + 31 satellites.
Puglia: Martina Franca (D-o) 220/44kW – M. Caccia (A-o) 34/6.8kW — M. Sambuco (H-o) 35/7kW + 10 satellites.
Basilicata: 23 satellites.
Calabria: Gambarie (D-o) 19/3.8kW – M. Scuro (G-o) 8/1.6kW – Roseto Capo Spulico (F-v) 12/2.4kW + 36 satellites.
Sicilia: M. Cammarata (A-o) 35/7kW – M. Lauro (F-o) 50/12kW – M. Pellegrino (H-o) 8/1.6kW – M. Soro (E-o) 5/1kW + 39 satellites.
Sardegna: M. Limbara (H-o) 3/0.6kW – M. Serpeddi (G-o) 2.12/0.424kW – Punta Badde Urbara (D-o) 145/29kW + 30 satellites.
D.Prgr: W 08.30–14.30 "Telescuola" (for schools), 17.30–18.30 (Childrens h), 18.30–23.15 (approx.), Sun: 10.15–12.00, 15.00–23.15.
SECOND PRGR:

Station	ch	kW	Station	ch	kW
Paganella	21	10/2	M. Favonc	29	20/4
Magnano	21	1/0.2	Messina	29	9/1.8
Udine	22	*150/30*	*Firenze*	29	*5.1/1.02*
M. Cimarani	22	9.6/1.92	Como	29	1.5/0.3
M. Penice	23	1800/360	M. Serpeddi	30	250/50
M. Faito	23	1400/280	Torino	30	200/40
M. Luco	23	20/4	Catanzaro	30	3/0.6
Fabriano	23	3.6/0.72	Sondrio	30	2.4/0.48
M. Argentario	24	250/50	Sassari	30	2.25/0.45
M. Lauro	24	200/40	Bertinoro	30	1.575/0.315
Gorizia	24	4.8/0.98	M. Peglia	31	200/40
L'Aquila	24	3/0.6	Trieste	31	25/5
M. Venda	25	1000/200	Saint Vincent	31	16.5/3.3
M. Caccia	25	500/100	M. Vergine	31	15/3
M. Settepani	25	5/1	Trapani-Erice	31	10/2
M. Ortobene	25	2.4/0.48	La Spezia	31	2.1/0.42
Gambarie	26	200/40	MartinaFranca	32	700/140
M. Conero	26	200/40	M. Beigua	32	60/12
Velletri	26	48/9.6	M. Limbara	32	20/4
M. Sambuco	27	200/40	M. Soro	32	15/3
M. Serra	27	200/40	Pietra Corniale	32	3/0.6
P. Badde Urbara	27	*200/40*	*M. Nerone*	33	*200/40*
M. Pellegrino	27	40/8	Potenza	33	3/0.6
Cima Penegal	27	7.65/1.53	Teramo	33	2.4/0.48
Aosta	27	4.5/0.8	Benevento	33	1.95/0.39
Terminillo	27	3.2/0.64	Poira	33	1/0.2
M. Sommafiume	27	1/0.2	M. Cammarata	34	200/40
Roma	28	150/30	Col Visentin	34	10/2
M. Scuro	28	25/5	Col de Courtil	34	5.4/1.08
Cagliari	28	9.6/1.9	Sanremo	34	2.4/0.48
Catania	28	3/0.6	Terni	34	2.4/0.48
Portofino	29	1000/200	Alghero	35	1.44/0.288

+ 34 low power st's less 1kW.
Po: All st's H, exc. M. Faito, M. Argentario, Gorizia, M. Settepani, M. Ortobene, Gambarie, M. Pellegrino, Cagliari, Sassari, La Spezia, Teramo and Alghero: V.
D.Prgr: Sun: 18.00–19.25, 21.00–23.30 (approx.). **W:** 21.00–23.15 (approx.). **N:** 21.00 – **Ad:** Nat. Prgr: 3.2%, 2nd Prgr: 2.2% of broadc. time – **TV sets:** 6.702.544 – **ALF:** Lire 12.000,–.

LUXEMBOURG

TELE LUXEMBOURG (Comm.)

Addr: Compagnie Luxembourgeoise de Telediffusion, Villa Louvigny, Luxembourg. **L.P:** see radio.
Station (819 lines): Dudelange ch7 100/20kW H + 5 low power satellites – **D.Prgr:** 18.00(Sat/Sun/Thurs 16.00)–21.30 – **TV sets:** 35.000 – **ALF:** Bfrs 192,-.

MALTA

BROADCASTING AUTHORITY MALTA

an independent Authority, to regulate and supervise radio and television broadc. in Malta with power to prescribe and produce prgr's – **Addr:** 12 Old Treasury Street, Valletta. **Cable:** Broadcasts. **Te:** Ce 21281 – **L.P:** see radio–TV sets: 29.490 – **ALF:** £ 4/0/0 (combined radio & TV).

THE MALTA TELEVISION SERVICE LTD. (Comm.)

A subsidiary of Rediff. International Ltd, London (Priv, Comm). **Addr:** P.O. Box 384, Gwardamanga. **Te:** Ce 25051. **Cable:** Television. **L.P:** Gen. Mgr: E. A. Hamilton-Hill, O.B.E. Mgr: W. A. Fenton. Chief Eng: A. J. Bartolo.
Station: ChE10 4.8/1.2kW H – **D.Prgr:** 17.30–21.30- **Fi:** Adv. revenue and contributions for certain prgr's prescribed by Malta Broadc. Authority.

MONACO

TÉLÉ MONTE-CARLO (Comm.)

Addr: 16 Blvd. Princesse Charlotte, Monte-Carlo. **Cable:** Tele Carlo. **Te:** 305940 – **L.P:** Dir. Gen: J. Frydman. Secr. Gen: J. F. Micheo.
Stations: chF2, F10 50/12.5kW H – **D.Prgr:** 18.30–22.00 – Monoscope identification W 14.00–16.00 – **TV sets:** 10.000.

NORWAY

NORSK RIKSKRINGKASTING: see page 116
TV sets: 490.000 – **ALF:** kr. 165,–

POLAND

POLSKIE RADIO I TELEWIZJA (Gov.)

Addr: Telewizja, *Plac Powstanców 7, Warszawa.* **Te:** *263093.* **Cable:** Telewar. **Telex:** 81421 – **L.P:** Pres: W. Sokorski. Vice Pres: S. Stefanski. Vicepres. Engineering: K. Kozlowski. Dir. Prgr: S. Bebenek. Chief Eng: R. Dzwonik. Film Buyer: W. Jankowski. Head Foreign Rel: T. Kedzierski.
Main Stations: Pol. H. ch OIRT.

	ch	kW		ch	kW
Bydgoszcz	1	100/20	Poznan	9	100/20
Warszawa	2	100/20	Lublin	9	100/20
Zielona Gora	3	200/40	Krakow	10	200/40
Kielce	3	200/40	Gdánsk	10	100/20
Olsztyn	6	8/1.6	Zgorzelec	11	0.17/0.034
Lódz	7	2.5/0.5	Wroclaw	12	123/25
Katowice	8	225/56	Szczecin	12	100/20
Koszalin	8	100/20	Rzeszów	12	100/20
Bialystok	8	100/20	Opole	10	0.6/0.12

+40 low power satellites.
D.Prgr's: 08.00–10.00, 16.00–22.00.
TV sets: 2.500.000 – **ALF:** 480 Zlotys.

PORTUGAL

RTP–RADIOTELEVISÃO PORTUGUESA S.A.R.L. (Comm.)

Addr: Head office: Rua de S. Domingos (à Lapa), 26 Lisboa. **Studio in Lisboa:** Alameda das Linhas de Torres, 44. **Porto:** Vila Nova de Gaia. **Cable:** Televisão. **Te:** 666134 – **L.P:** Dir. Adm: F. X. A. Conseicao. Dir. Prgr: C. M. de Araujo. Dir. Tec: B. Machado. Head External Rel. Div: Dr. A. de Bivar.
Stations: chE: Lisboa 7 100/20kW H – Porto 9 100/20kW H – Lousa 3 60/12kW H – Montejunto 6 1/0.2kW H – Mendro 5 20/4kW H.
Relay st's: Monchique ch8 15/3kW H – Marofa ch5 5/1kW H – S. Mamede ch10 5/1kW H + 9 low power stations – **D.Prgr:** W 14.00–23.00. Sun 11.30–12.30, 14.00–23.00 – **Fi:** Licence payments and adv – **ALF:** Esc. 360 – **TV sets:** 202.276.

RUMANIA

RADIODIFUZIUNEA TELEVIZIUNEA ROMANA (Gov.)

Addr: *Televiziunea Romana, Str. Molière 2, Bucharest.* **L.P:** see Radio.
Stations (System OIRT – 625 lines): Pol: H.
Bucuresti chR2 20/10kW – Bacau chR1 0.6/0.4kW – Oradea chR3 20/6kW – Tg. Mures chR5 5/1.5kW – Timisoara chR9 5/1.5kW – Isai chR9 5/1.5kW – Constanta chR10 4/1.5kW – Cluj chR11 4/1.5kW – Deva chR12 5/1.5kW – + 20 low power repeater st's.
Projected for 1967: Bucegi chR6 20/6kW, Craiova chR8 20/6kW, Suceava chR4 4/1.5kW + 11 low power repeaters.
D.Prgr: Tues–Sat 16.00–21.00; Sun 06.30–10.00, 16.00–21.00. Monday no prgr's. – **TV sets:** 575.000.

SPAIN

TELEVISION ESPAÑOLA (Gov.)

Addr: Apt. de Correos 26002, Madrid 1. **Te:** 2382040. **Telex:** 07694. **L.P:** Dir. Gen: J. Aparicio B. Vice Dir. Gen: L. Ezcurra C. Dir. Prgr. (1st Netw): A. Suarez. Dir. Prgr. (2nd Netw): S. Pons. Dir. Tec: E. Gavilán.
Stations (Pol: H):
1st Prgr: Madrid chE2 500kW, Zaragoza chE2 3kW, Alicante chE3 60kW, Oviedo chE3 60kW, Tenerife chE3 300kW, Madrid chE4 1,5kW, Barcelona chE4 150kW, Bilbao chE4 60kW, Sto. de Compostela chE4 120kW, Sevilla chE4 120kW, Lérida chE5 3kW, Valencia che5 3kW, Mallorca chE6 3kW, Granada chE7 150kW – **D.Prgr:** Mon–Fri 13.00–16.00, 18.00–23.00; Sat 13.00–24.00; Sun 09.30–23.00.
2nd Prgr: Madrid ch21 100kW, Valencia ch22 100kW, Bilbao ch22 100kW, Madrid ch24 1.500kW, Barcelona ch31 300kW, Zaragoza ch33 250 kW, San Sebastian ch48 100kW – **D.Prgr:** 19.45–23.00 (Sat 24.00). – **TV sets:** 2.075.000.

ATTENTION: WIRELESS OPERATORS
Only the WRTH enables you to know where, when and what to tune in to when crossing the oceans. WRTH is your key to advance knowledge of what happens in your next port and country.

SWEDEN

SVERIGES RADIO

Swedish TV; run by Sveriges Radio, has the same non-comm, and official status as the broadc. service – **Addr:** Radiohuset, Oxenstiernsgatan 2, Stockholm. **Postal Addr:** Box 955, Stockholm 1. **Te:** 670865 (local 631000). **Cable:** Broadcast – **L.P:** Dir. Prgr: N. E. Baehrendtz. For other personalities: see radio.

Kungl. Telestyrelsen (The Telecommunication Administration) has the responsibility for the distribution of the prgr's produced by Sveriges Radio and has also charge of the collection of licence fees – **Addr:** Box 16065, Stockholm 16 – **L.P:** see radio.

Stations: chE, Po: H, kW (E.R.P).

Name	ch	kW	Name	ch	kW
Hörby	2	100/20	Halmstad	7	60/12
Örebro	2	60/12	Motala	7	3/0.6
Vännäs	2	60/12	Trollhättan	7	1/0.2
Uddevalla	2	5/1V	Bäckefors	8	60/12
Skövde	3	60/12	Emmaboda	8	60/12
Sveg	3	60/12	Haparanda	8	60/12
Boden	4	60/12	Lycksele	8	30/6V
Stockholm	4	60/12	Mora	8	10/2V
Östersund	4	60/12	Västerås	8	10/2
Arvidsjaur	5	60/12	Ånge	8	15/3
Norrköping	5	60/12	Gällivare	9	60/12
Sundsvall	5	60/12	Gävle	9	60/12
Vislanda	5	5/1V	Göteborg	9	60/12
Karlstad	5	1/0.2V	Hälsingborg	9	1/0.2
Kiruna	6	60/12	Tåsjö	9	60/12
Västervik	6	25/5	Linköping	9	1/0.2
Bollnäs	6	60/12	Visby	9	25/5
Skellefteå	6	10/2	Karlskrona	9	3/0.6V
Uppsala	6	3/0.6	Nässjö	10	60/12
Örnsköldsvik	6	3/0.6V	Borlänge	10	60/12
Borås	6	3/0.6V	Malmö	10	1/0.2
Pajala	7	60/12	Storuman	10	60/12
Sollefteå	7	60/12	Varberg	10	1/0.2V
Sunne	7	60/12	Hörby	43	500/100

+ 76 low power satellites.

TV st's under construction: Finnveden ch4 3kW V, Karlshamn ch11 10kW, Kisa ch11 30kW, Väddö ch8 200kW V (Beam 70°), Östhammar ch11 30kW + 24 satellites.

D.Prgr: (Schools prgr's not included). Sun 12.00–14.00, 15.00–16.00, 17.15–22.00. Mon 13.00–15.00, 17.30–21.45. Tues 15.30–15.50, 18.00–21.00, Wed 13.00–15.15, 17.30–21.00. Thurs 18.00–21.30, Fri 15.30–15.50, 17.00–21.35. Sat 13.00–22.30. Times are approx.

TV sets: 2.140.877 – **ALF:** Sv. Kr. 130,–.

SWITZERLAND

SWISS TELEVISION (Gov.)

Addr: Swiss Television, 26 Kreuzstrasse, Zürich. **Cable:** Telesuisse. **Te:** Zürich (051)34.80.30, Geneva (022)24.72.50, Lugano-Besso (091) 32021 – **Studios:** Kreuzstrasse 26, 8000 Zürich; 66 Boulevard Carl-Vogt, 1200 Geneva; 6903 Lugano-Besso.

L.P: Dir. Swiss TV: E. Haas. Reg. TV Dir. & Head of German Prgr: Dr. G. Frei. Reg. TV Dir. & Head of French Prgr: R. Schenker. Reg. TV Dir. & Head of Italian Prgr: F. Marazzi. Head Tec: H. R. Züst. Head Prgr. Coordination: F. R. Tappolet.

Stations: ch E. Po: H.

German Prgr:	ch	kW		ch	kW
Bantiger	2	30/6	Säntis	7	15/3
Celerina	9	6/1.2	Uetliberg	3	100/20
Niederhorn	12	5/1	Valzeina	10	5/1
Rigi	6	30/6	+ 28 low power Boosters.		
St. Chrischona	11	50/10			

French Prgr:	ch	kW		ch	kW
Bantiger	10	100/20	Les Ordons	7	6/1.2
La Chaux de Fonds	9	4.5/0.9	Mt. Pèlerin	11	3.5/0.7
La Dôle	4	144/28.8	+13 low power Boosters.		

Italian Prgr:	ch	kW		ch	kW
Mt. Ceneri	5	4.5/0.9	Mt. S. Salvatore	10	10/2

+15 low power Boosters.

D.Prgr: German: Sun 08.00–09.00(fortnightly), 10.00–11.05, 13.00–21.30; Mon 17.15–21.30; Tues 17.45–21.30; Wed 15.30–17.15 & 17.45–21.30; Thurs 16.00–17.15 & 17.45–21.30; Fri 15.45–17.15 & 17.45–22.30; Sat 13.00–14.00 & 15.45–22.00.

French: Sun 08.00–09.00(fortnightly), 10.00–21.30; Mon 16.00–21.45; Tues 17.45–22.00; Wed 15.45–17.00 & 17.45–21.45; Thurs 16.30–21.45; Fri 17.45–22.45; Sat 13.00–14.00 & 16.00–22.00.

Italian: Sun 10.00–11.00, 12.30–18.00, 18.45–21.45; Mon/Tues 18.15–21.45; Wed 15.45–17.00 & 18.15–21.45; Thurs 16.00–17.15 & 18.15–21.45; Fri 18.15–22.45; Sat 13.00–14.00 & 17.00–22.00. (From March 1st also 16.00–16.45 on Mon, Tues, Fri).

Relay facilities: A microwave link across the Alps. It runs from Gempen, near Bale (northern border) to Froburg-Bantiger-Jungfrau (12.200 ft.) – Mt. Generoso (southern part of Switzerland) on the one side, and the German and Italian TV systems on the other side – A second microwave link runs from Uetliberg-Froburg-Bantiger-Romont – La Dole. It has been extended to Cuiseaux for the programme exchange with France – Third link: Uetliberg–Säntis–Pfänder (Austria) **Fi:** By the proceeds from the TV licence-fees, divided between the SBC and PTT at the rate of 70:30 per cent and from February 1st, 1965, by the proceeds from commercial television: 12 minutes per weekday at the utmost in the early evening, at the rate of 7000 frs a minute – **TV sets:** 706.534 – **ALF:** Frcs 84,–.

U.S.S.R.

THE SOVJET TELEVISION (Gov.)

Addr's of the most important TV studios: Tsentralnaja studija televidenija Moskva, ul. Sjabolovka 53 (Dir: I. Inozemtsev) – Leningradskaja studija televidenija Leningrad ul. Malaja Sadovaja 2 – Kijevskaja studija televidenija Kijev, Krestjatik 24 – Minskaja studija televidenija Minsk, ul. Kalinina 6 – Rizjskaja studija televidenija Riga, ul. B. Nometnu 62 – Tallinskaja studija televidenija Tallin, ul. Krejtsvalda 14 – Bakinskaja studija televidenija Baku, Parkovajaul – Tasjkentskaja studija televidenija Tasjkent, ul. Navoi 69 – Jerevanskaja studija televidenija Jerevan, pr. Ordzjonokidze 22 – Tbilisskaja studija televidenija Tbilisi pr. Rustaveli 12 – Vilnjusskaja studija televidenija Vilnius, studija televidenija – Alma-Atinskaja studija televidenija Alma-Ata, studija televidenija – Kisjinjovskaja studija televidenija Kisjinjov, studija televidenija.

Stations: Television Centres: Channel R. Def. 625. Po: H.
Moscow ch1 15/4kW – Moscow ch3 7.5/3kW – Moscow ch8 (colour).
D.Prgr: ch1: W 09.00–10.00, 13.55–20.00; Sat 11.55(Sun 07.00)–20.00.
ch3: (Moscow local prgr.) 15.30–20.30.
ch8: (educational prgr.) D 1 h (15.00–16.00 approx; Fri 08.00–09.00).

RSFSR: Abakan ch1 – Arkhangelsk ch1: 13.00–18.00; Sat 12.30–16.00; Fri/Sun also 12.30–16.00 – Biysk ch1 – Blagoveschensk ch3 5/2kW – Bryansk ch2 – Cherepovets ch5 – Chelyabinsk ch4 15.00–18.00 – Chistopol ch7 – Gorkiy ch2 – Grozny ch3 – Izhevsk ch2 – Irkutsk ch3 – Kazan ch1 – Kaliningrad ch4: 15.00–19.30 – Kemerovo ch5 – Khabarovsk ch3 – Kirov ch3 – Komsomolsk ch1 – Krasnodar ch5 – Krasnojarsk ch2 – Kurgan ch5 – Kursk ch9 – Kuybyshev ch3 – Leningrad ch1 15/4kW – Leningrad II ch3 – Magadan ch1 – Magnitogorsk ch3 – Murmansk ch3 – Nalchik ch1 5/2kW – Novomoskovsk ch5 – Novosibirsk ch2 – Norilsk ch1 – Omsk ch1 5/2kW – Orel ch6 – Orenburg Penza ch4 – Perm ch1 – Petrozavodsk ch2 5/2.5kW: 15.00–19.00 – Petropavlovsk/Kamchatka – Pyatigorsk ch2 – Rostov ch1 – Rybtsovsk ch2 – Saransk ch8 – Saratov ch1 – Smolensk ch5 – Sochi ch1 – Sverdlovsk ch3 5/2kW – Tomsk ch1 5/2kW – Tyumen ch1 5/2kW – Ulyanovsk ch5 – Ufa ch1 5/2kW – Vladivostok ch1 – Vorkuta ch3 – Voronezh ch3 – Yaroslavi ch2 – Konotop, Kurgan, Raychinsk, Uhkta, Urgench, Yoshar-Ola, Yuzhno-Sakhalinsk ch3 – Syktyvkar – Ulan-Ude ch3 – Volgograd ch4 –

Azerbajan SSR: Baku ch3 5/2kW. **D.Prgr:** 14.05–18.30 – Baku II ch7 (Rel. R. Moscow) 14.00–16.00 –
Lithuanian SSR: Vilnius ch4 15/4kW – **Armenian SSR:** Yerevan ch1 5/2kW: 14.00–19.00(Sun –20.00), Thurs/Sun also 07.00–10.00(Sun 12.00)

Estonian SSR: Tallinn ch2 15/4kW – Tallinn II ch3 – **Kazakh SSR:** Alma-Ata I ch3 5/2kW 11.00–18.00 (Sun also 05.00–07.00) in Kazakh & Russian; Alma-Ata II ch10 (Rel. R. Moscow) – Balkhash – Aktjubinsk – Chimkent – Uralsk – Dzhezkazgan ch1 – Karaganda ch1 – Kustanai – Pavlodar-Petropavlovsk – Rudno – Tselinograd – Ust-Kamenogorsk ch1.

Latvian SSR: Riga I ch3 5/2kW: 09.00(Sun 07.00)–11.00, 14.55(Sat 12.55)–19.00, Sun 13.15–20.00 – Riga II ch10 (Rel. R. Moscow): 08.00–10.00, 13.45–19.00, Sat/Sun 10.15–19.00 – **Moldavian SSR:** Kichinev ch3 15/4kW 16.00–20.00 – **Ukrainian SSR:** Dnepropetrovsk ch5 5/2kW – Donetsk ch4 15/4kW – Kherson ch3 2/1kW – Kiev ch2 15/4kW 15.00–20.00 (Sat also 10.30–11.00, 13.30–14.00) – Kiev II ch3 – Lugansk ch2 – Lutsk ch3 – Lvov ch1 – Nikolayev ch2 – Odessa ch5 15/4kW – Sevastopol-Kharkov ch3 7/3.5kW – Simferopol ch3 – Vinnitsa – Zaporozhye ch6 – **Uzbek SSR:** Tashkent ch3 5/2.5kW 12.00–16.00 – Adrasman I (rel. Tashkent), Adrasman II (rel. Moscow) – **Georgian SSR:** Tbilisi ch4 5/2kW – **Kirghiz SSR:** Frunze ch1: Sun 05.00–08.00, D 12.00–17.00 – **Tadjik SSR:** Dushanbé ch1 – **Turkmenian SSR:** Ashkhabad ch1 13.00–17.30 (Sun also 05.00–16.00) – Nebit-Dag.

Projected Stations: Television Centres:
RSFSR: Belgorod – Berezniki – Cheboksary – Chita – Ordzhonikidse – Stavropol – Yakutsk. **Ukrainian SSR:** Stanislav. **Uzbek SSR:** Nukus. **Turkmen SSR:** Krasnovodsk. **Azerbajan SSR:** Kirovobad – Nakhichevan.

F.Pl: New television centre at Moscow-Ostankino: 6 different prgr's with a total broadc. time of 50 hrs per day (completion Oct. 1967).

YUGOSLAVIA

RADIO TELEVISION YOUGOSLAVE

Addr's: Radiotélévision Yougoslave: 70, B. Kidrica, Beograd. **Te:** 43-693. **Telex:** 11-469 Yujurate Beograd – **Radiotélévision Beograd:** 10, Trg Marksa i Engelsa. **Te:** 24-214. **Telex:** 11-488 – **Radiotélévision Zagreb:** 4, Jurisićeva, Zagreb. **Te:** 37-741. **Telex:** 21-326 – **Radiotélévision Ljubljana:** 17, Tavcarjeva, Ljubljana. **Te:** 311-922. **Telex:** 31-118.

L.P: Radiotélévision Yougoslave: Pres. Adm. Com: I. Bojanic. Secr. Gen: Dr. I. Pustisek, Head For. Rel: Mrs. O. Vojvodić. Pres. Prgr. Com. TV: M. Matevski. Secr. Prgr. Com. TV: M. Milosavljevic. Pres. Tech. Com: R. Zizic – **Radiotélévision Beograd:** Dir. Gen: Z. Vuković. Dir. TV: D. Ilic. Chief Editor TV: A. Stefanovic, A. Vitorovic. Dir. Tec: R. Zizic – **Radiotélévision Zagreb:** Dir. Gen: I. Bojanić. Dir. TV: T. Golubović. Chief Editor TV: A. Zadrović. Dir. Tec: V. Trs – **Radiotélévision Ljubljana:** Dir. Gen: B. Mikos. Dir. TV: D. Fortić. Chief Editor TV: I. Gruden, B. Hvala. Dir. Tec: S. Pernus.

Stations in operation (625 lines, sound: FM, Po. H chE).

Serbia	ch	kW(ERP)
Kopaonik	3	50/10
Jastrebac	5	100/20
Subotica	5	35/7
Avala	6	100/20
Goles	7	35/7
Ovcar	8	8/1.6
Crveni Cot	10	100/20
Tupiznica	10	35/7
Crni Vrh	11	35/7
+13 low power repeaters.		
Croatia		
Labistica	4	15/3
Psunj	4	100/20
Srdj	6	5/2.5
Celevac	8	50/10
Sljeme	9	100/20
Ucka	11	100/20
+6 low power repeaters.		
Slovenia		
Kum	3	2/0.4
Krvavec	5	50/10
Nanos	6	35/7
Plesivec	6	35/7
Pohorje	11	10/2
Ljubljana–Krvavec	21	5/1
+44 low power repeaters.		
Bosnia/Herzegovina		
Kozara	6	10/2
Hum	8	10/2
Vlasic	11	100/20
+47 low power repeaters.		
Macedonia		
Crni Vrh	6	50/10
Mali Vlaj	9	3/0.6
Pelister	4	1.5/0.3
Turtel	11	2.5/0.5
+8 low power repeaters.		
Montenegro		
Lovćen	8	67/13.5
Bjelasica	12	6.8/1.36
+15 low power repeaters.		

D.Prgr: Common Prgr. for Beograd, Zagreb, Ljubljana, Skopje, Sarajevo, Titograd: Sun 08.25–22.00; Mon 09.00–11.10, 16.05–21.45; Tues 16.05–21.45; Wed 09.00–11.00, 14.45–21.15; Thurs 09.00–10.00, 16.35–21.30; Fri 09.00–11.00 14.35–21.30; Sat 09.00–10.00, 16.10–22.10. Test tr's (Beograd, Zagreb, Ljubljana, Skopje): W one h before tr's.

Fi: By license payments – **Ad:** 170 min's pr. week – **TV sets:** 680.697. **ALF:** 24.000 Din.

AFRICA

ALGERIA

RADIO ALGERIE (Gov.)

Addr: 21, Blvd. des Martyrs, Algiers – **L.P:** see radio.

Stations: Def. 819: Algiers ch11 20/5kW H d – Oran ch8 12.5/1.25 kW H – Tizi-Ouzou ch7 0.1/0.025kW (repeats ch11 Algiers) – Chrea ch6 (Satellite) 5/1.25kW H – Constantine ch7 0.2/0.05kW H.

D.Prgr's: 19.00–23.00.

St's under construction: Algiers ch11 2/0.4kW, Constantine ch7 10/2kW, Oran ch10 2/0.4kW, Setif ch5 10/2kW, Akfadon ch10 10/2 kW, Chiea ch9 10/2kW, Orleansville ch6 10/2kW, Tersala ch8 10/2kW.

TV sets: 33.000 – **ALF:** DA 85,–.

CANARY ISLANDS

TELEVISION ESPAÑOLA EN CANARIAS

Addr: Rambla del General Franco 59, Santa Cruz de Tenerife, or Casa del Marino, Las Palmas de Gran Canaria. **Te:** Tenerife 1198, Las Palmas 41422 – **L.P:** Dir: D. M. de Zavala Castella.

Station: Santa Cruz de Tenerife chE3 350/70 H – Las Palmas (relay) chE6 60/12W H.

D.Prgr: 14.00–15.30, 18.15–24.00.

CONGO (Dem. Rep.)

TV COLLÈGE 9Q2AC (Cult.)

Addr: B.P. 296, Lubumbashi. **L.P:** see radio. **Station** (System K): 215.25/221.75Mc 5W. **D.Prgr:** 18.00–19.30

CONGO

RADIODIFFUSION TELEVISION CONGOLAISE (Gov.)

Addr: B.P. 2241, Brazzaville. **L.P:** St. Mgr: L. Ch. N'Goma-M'by. Dir. Tec: M. Sezile. **Station** (System D 625 lines): 199.25/205.75Mc 2kW H. **D.Prgr:** D. exc Mon: 17.30–20.00. For schools W 08.00–10.15. **TV sets:** 1.600.

EGYPT

U.A.R. BROADCASTING CORPORATION OF CAIRO

Addr: TV Bldg, Cornish Rd, Cairo. **Te:** 812070. **Cable:** Kahivision. **L.P:** Chm: M.A. Hammad. Dep.Dir.Prgr's: S. Labib. For other personnel: see radio.

Stations: chE; Sound FM: Vision AM (CCIR Standard).

	ch	kW			ch	kW	
Cairo I	5	100/20	H	Ismailia	6	6/1.2	V
Cairo II	7	20/4	H	Suez	9	6/1.2	H
Cairo III	9	20/4	H	Bush	11	6/1.2	H
Alexandria I	6	25/5	H	Maghagda	6	6/1.2	H
Alexandria II	9	6/1.2	H	El-Minya	9	6/1.2	H
Mansoura	8	25/5	H	Mallawi	6	3.5/0.7	H
Tanta	10	13.5/2.7	H	Qusiya	5	6/1.2	H
Assuan	5	10/2	H	Assuit I	11	10/2	H
Port Said	3	10/2	H	Assuit II	7	6/1.2	H
Kassasin	9	6/1.2	V	Sohag	9	6/1.2	H

1st Prgr. (Cairo I, Alexandria I, Mansoura, Kassasin, Ismailia, Assuit I, Suez, Port Said, Bush, El-Minya, Mallawi, Qusiya, Maghagha); 14.00 (Fri 09.00)–22.00 – **2nd Prgr.** (Cairo II, Alexandria II, Tanta): D 15.00–21.30 – **3rd Prgr.** Cairo III: 16.00–19.05; Assuan 16.00–21.00; Assiut II 17.00–20.00.

Projected Stations: Kom-Aumbo ch10 10/2kW H, Edfo ch8 16/3.2kW H, Essna ch6 16/3.2kW H, Luxor ch11 10/2kW H, Quena ch9 5/1kW H, Sohag ch7 50/10kW H, Assuit ch10 50/10kW H, Minya ch8 160/32kW V, B. Ali ch6 8/1.6kW V, Bany Suaif ch11 80/16kW V, Damietta ch6 6/1.2kW H.–**Fi:** By license payments, state subsidy and adv – **TV sets:** 375.000 – **ALF:** £ (Egypt) 5/0/0.

ETHIOPIA

ETHIOPIAN TELEVISION SERVICE (Gov.)

Addr: P.O. Box 1020, Addis Ababa. **Te:** 16701. **Cable:** Ethiotv – **L.P:** Head of TV: A. S. Ferenji.

Station: chE7 0.5/0.1kW – **D.Prgr:** 17.00(Sat 14.30)–19.30. For schools: Mon–Fri 08.00–09.30. **TV sets:** 5000

GABON

TELEVISION GABONAISE (Gov – educational)

Addr: B.P. 150, Libreville. **Cable:** Telegabon – **L.P:** see radio. **Station** System K (625 lines): 175.25/181.75Mc 0.05/0.1kW H.

D.Prgr: Wed–Sun 18.45–21.00.

TELEVISION PORT-GENTIL (Gov.)

Addr: B.P. 323, Port Gentil – **Station:** System K (625 lines): 207.25/213.75Mc 0.05/0.01kW H – **D.Prgr:** Thurs–Mon 18.45–21.00. **TV sets:** 870.

GHANA

GHANA RADIO AND TELEVISION CORPORATION (Gov)

Addr: P.O. Box 1633, Accra – **L.P:** see radio.

Stations (System B 625 lines): Kissi ch2 15/3kW H – Jamasi ch3 15/3kW H – Adjankote ch4 15/3kW H – Tamale ch5 0.2/0.4kW H – Akosombo (relay) ch5 0.015/0.003kW H – **D.Prgr's:** 17.30–22.00 (Sun also 16.00–17.30). For schools: W 09.00–10.30 **TV sets:** 5.000

IVORY COAST

RADIODIFFUSION TELEVISION IVORIENNE (Gov.)

Addr: B.P. 2261, Abidjan. **Te:** 49644. **Cable:** RTI – **L.P:** see radio.

Stations (System K, 625 lines): Abidjan chR10 10/2kW H – Bouaflé chR9 10/2kW V – **D.Prgr:** 18.00–21.45 – **TV sets:** 5000.

KENYA

VOICE OF KENYA TELEVISION (Gov.)

Addr: Box 30456, Nairobi. **Te:** 24211. **L.P:** Dir: R. A. Koske. Dir: Prgr's: M. Mwendar.

Stations: chE4 15/3kW H – Relay st: chE2 0.5/0.1kW.

D.Prgr: 14.30(Sun 14.00)–19.30 in English/Swahili– **Fi:** By licence payments, adv. & Gov. subvention – **Ad:** 6 min's per h – **TV sets:** 10479 – **ALF:** £ 3/0/0.

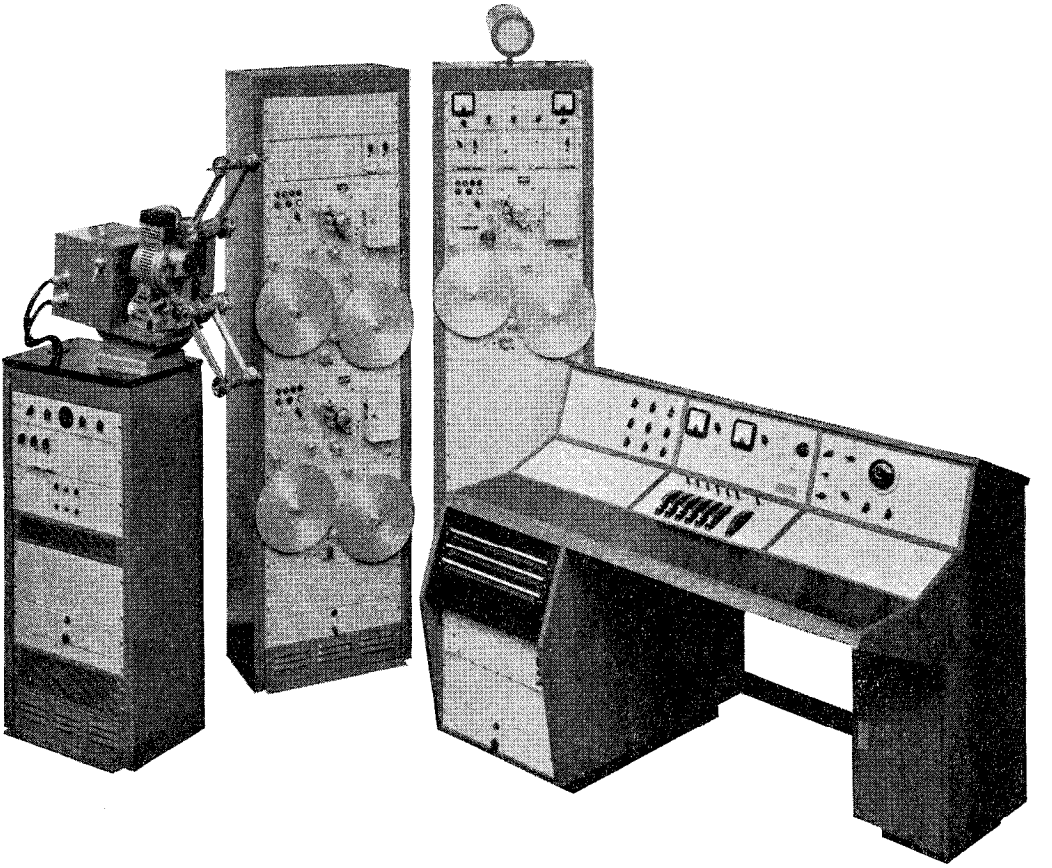
LIBERIA

LIBERIAN BROADCASTING CORPORATION (Gov, Comm.)

Addr: P.O. Box 594, Monrovia. **Te:** 22011 – **L.P:** see radio.

Station: ELBC-TV chE6 2.5/0.45kW – **D.Prgr's:** 18.30–23.00.

TV sets: 3.500.



The worlds' finest recording equipment ...by Westrex

There is only ever one best, and in the sphere of 16/35 mm photo/mag. studio recording and re-recording equipment, Westrex is the one. Westrex recording equipment is the result of detailed research and development, backed by many years of international experience in producing equipment for the world's finest studios. For example, Westrex equipment is installed at the BBC, Rediffusion television, and MGM Studios, in London: Bavaria Atelier, Munich: Cinetone Studios, Amsterdam: Valentin de Carvalho Studios, Lisbon.
More than thirty years in the lead has given Westrex Engineers all the answers.

During that time the Oscar for the best recording of the year has been won 27 times by films recorded on Westrex equipment. If you want the best it must be Westrex. Write today for full technical details of Westrex dubbing consoles, review room projection and sound equipment and the name of your nearest Westrex Agent.

Westrex

A DIVISION OF LITTON INDUSTRIES

WESTREX COMPANY LIMITED

152 COLES GREEN ROAD, LONDON NW2 ENGLAND GLADSTONE 5401

MAURITIUS

MAURITIUS BROADCASTING CORPORATION (Comm.)
Addr: Malherbes Transmitter Bldg, Forest Side. **L.P:** see Radio. **Stations:** Forest Side chE4 5/1kW H. Port Louis (satellite) chE7 0.3/0.06kW H. Souillac (satellite) chE9, Flac (satellite) chE11. **D.Prgr:** 14.30–18.00. – **TV sets:** 7.500.

MOROCCO

RADIODIFFUSION TELEVISION MAROCAINE (Gov.)
Addr: 1, rue Pierre Parent, Rabat – **L.P:** see radio – **Stations:** Rabat chM7 180/36kW H, Casablanca chM10 180/36kW H, Zerhoun chM4 180/36kW H, Marrakech chM6 0.3/0.06kW H, Bou Khouali 36/7kW H, Cap Spartel chM5 1.5/0.3kW H + 6 low power st's. **D.Prgr:** 19.30–24.00. **French:** 19.30–21.00. **Arabic:** 21.00–24.00. **TV sets:** 36.479 – **ALF:** DH 30,–.

NIGERIA

NIGERIAN TELEVISION SERVICE (NTS – Gov, Comm.)
Addr: Television House, Victoria Island, Private Mail Bag 12005, Lagos. **Te:** 26391. **Cable:** Nivision. **L.P:** Man. Dir: G. Roger Bower. Dir. of Prgr's: C. Kolade. Dir. of Eng: C.E. Rust. Dir. of Adm: D.A. Smith. Comm. Dir: B. Ovbiagele. Film Buyer: S. Olusola. **Station:** Lagos chE10 40/8kW H. **D.Prgr's:** 17.30–23.00. **Fi:** By state & comm. revenue. **Ad:** 10% of broadc. time. **TV sets:** 33.000.

EASTERN NIGERIA TELEVISION (ENTV):
Addr: P.O. Box 350, Enugu – **L.P:** see radio.
Stations: Enugu chE2 60kW H, Aba chE4 60kW.
D.Prgr: W 17.00–21.30 (Sat/Sun 23.00).

RADIO KADUNA TELEVISION (RKTV)
Addr: RKTV, Box 250, Kaduna, No. Nigeria. **Te:** 2294. **Cable:** Radionorth – **L.P:** see radio – **Stations:** Jaji chE4 48kW H – Kano chE10 25 kW H – **D.Prgr:** 17.30–21.30.

WESTERN NIGERIA RADIOVISION SERVICE
Addr: P.O. Box 1460, Abadan – **L.P:** see radio.
Stations: Abafon (Lagos) chE3 60/12kW H – Ibadan chE4 1.5/0.3kW H – **D.Prgr:** 16.30–21.45 (or 22.15); Schools 10.00–10.30, 12.00–13.00 – **F.Pl:** Ibadan chE4 50/10kW H, Ilesha chE5 50/10kW.

REUNION (French)

OFFICE DE RADIODIFF. TELEVISION FRANCAISE (Gov.)
Addr: B.P. 309, St. Denis – **L.P:** Dir. Tec: R. Varennes. For other personnel see radio.
Stations (System K, 625 lines): St. Denis ch8 50/10W, Le Port ch4 100/20W, St. Suzanné ch5 100/20W, Piton Textor ch9 100/20W, Piton Hyacinthe ch7 100/20W – **D.Prgr:** 15.00–18.00 – **TV sets:** 4.500.

RHODESIA

RHODESIA TELEVISION LIMITED
Addr: P.O. Box HG. 200, Highlands, Salisbury – **L.P:** Man. Dir: J. Terry. Chief Eng: K. Knight – **Stations:** Salisbury chE4 20kW – Bulawayo chE3 3kW – **D.Prgr:** Mon, Tues 15.25–20.40; Wed–Fri 15.25–21.10; Sat 15.10–21.10; Sun 13.40–20.35. For Schools: Tues 09.10–10.10; Mon, Wed, Thurs 12.00–13.00 – **TV sets:** 31.796 – **ALF:** £ 6.

SENEGAL

SENEGAL TELEVISION (Gov-Educ.)
Addr: Projet-Pilote, Centre for Mass. Inf. & Educ. (UNESCO), B.P. 2375, Dakar. **Te:** 235-54 – **L.P:** Dir: Ch. Fall. Dir. of Projet-Pilot: I. Ba. Dir. Tec: A. N. Diaye.
Station (625 lines): Dakar ch III 0.05kW H.
D.Prgr's: Mon, Tues, Wed, Thurs 17.00–17.30. Twice a month Fri 21.00–22.15 – **F.Pl:** A fourth prgr. consisting of a twice weekly French literacy series – **TV sets in use:** 30.

SIERRA LEONE

SIERRA LEONE TELEVISION (Gov.)
Addr: Private Mailbag, Freetown – **L.P:** Ag. Gen. Mgr & Chief Eng: A. H. Khanu – **Station:** chE2 0.1kW H. **D.Prgr:** W 18.30–23.00, Sun 14.00–16.00, 18.30–23.00 – **Ad:** Comm. adv. spots accepted. **TV sets:** 1150.

SOMALI (French)

ORTF: Station (System K, 625 lines): Djibouti 183.25/189.75Mc 0.05kW H (planned for February 1967).

SUDAN

SUDAN TELEVISION (Gov.)
Addr: TV-Omdurman. **Te:** 52100. **Cable:** Irshad-TV. **L.P:** St. Mgr: A. Shumo. Dir. Tec: R. Mirghani. **Station:** chE5 1.5kW H. **D.Prgr:** 16.30–20.30. **TV sets:** 11.000.
TV sets: 500.

TUNISIA

RADIODIFFUSION-TELEVISION TUNISIENNE (Gov.)
Addr: 139, Avenue de Paris, Tunis – **L.P:** see radio.
STATION (CCIR 625 lines): Bou-Kornine chE6 1.3/0.325kW H. **D.Prgr:** 18.00–21.00. **TV sets:** 5.500

UGANDA

UGANDA TELEVISION SCE (Comm. – operated by Ministry of Inf. Broadc. and Tourism). **Addr:** P.O. Box 4260, Kampala. **L.P:** St. Mgr: A.R. Aldridge. Dir. Tec: H.G. Toombs. **Station:** Kampala ch5 & 10 60kW H. **D.Prgr:** 15.00–19.00. **TV sets:** 5.300.

UPPER VOLTA

VOLTA VISION (Gov.)
Addr: B.P. 511, Ouagadougou – **L.P:** see radio.
Station (System D 625 lines): Ouagadougou ch6 0.05kW V.
D.Prgr: D exc. Sat 20.00–22.00.
Projected: Koudougou 1kW H – Bobodioulasso 1kW H.
TV sets: 500

ZAMBIA

ZAMBIA BROADCASTING SERVICES (Gov, Dept.)
Addr: Broadc. House, P.O. Box RW 15, Lusaka. **Te:** 72986; P.O. Box 1100, Kitwe. **Te:** 3507. **Cable:** Broadcasts TV – **L.P:** Contr. TV: G. J. Wykes. For other personnel: see radio.
Stations: Lusaka chE3 1/0.5kW H – Kitwe chE4 13.6/2.7kW H.
D.Prgr's: 13.30–20.30. **Educ. Prgr's** (school terms only): 09.45–11.00 (Kitwe only) – **TV sets:** 20.000 – **ALF:** £ 5.

ASIA

ADEN (Federation of So. Arabia)

SOUTH ARABIAN TELEVISION SERVICE (Gov, Comm.)
Addr: Box 1264, Aden – **L.P:** see radio.
Stations (625 lines): Al-Aineh chE4 0.4kW H, Al-Bargh chE10 0.4kW H, Ga'ar (Abyan) chE7 0.2kW H + 2 satellites (Crater chE8 & Little Aden chE5) to start 1967 – **D.Prgr:** Educ. Prgr: Mon, Sat 07.00–08.00; Comm. Prgr: D 15.00–19.30 – **TV sets:** 20.000.

CAMBODIA

R. CAMBODGE TELEVISION (Gov.)
Addr: 28 Ave Preah Mohaksatryany Kossomak, Phnom Penh. **L.P:** see radio. **Stations:** chA8 5/2.5kW H – Bokor chA11 100/25W (rel). **D.Prgr:** Tues, Thurs, Sat 11.00–12.00 – **TV sets:** 7000.

CHINA (Peoples Rep. of)

Stations:	Vision	Sound		Vision	Sound		Vision	Sound
Peking	Mc	Mc		Mc	Mc		Mc	Mc
1st Prgr.	57.75	64.25	Shenyang	93.25	99.75	Taiyuan	49.75	56.25
2nd Prgr.	77.25	83.75	Changch.	57.75	64.25	Hofei	85.25	91.75
Shanghai	93.25	99.75	Canton	57.75	64.25	Nanking	49.75	56.25
Tientsin	77.25	83.75	Sian	49.75	56.25	Wuhan	93.25	99.75
Harbin	49.75	56.25						

Relay st's: Hangchow** 57.75/64.25Mc, Soochow** 57.75/64.25Mc, Tangshan* chR4, Wusih** 57.75/64.25Mc.
* repeating Peking; **repeating Shanghai; Peking I: 5/2.5kW H.
Experimental st's: Anshan, Changsha, Chengtu (all 57.75/64.25 Mc), Chiamussu chR1, Foochow chR5, Fushun chR1, Hekang chR4, Kirin chR1, Kweiyang chR5, Lanchow chR1, Tsinan chR3, Tsitsihar 57.75/64.25Mc.

CHINA (Rep. of) (Taiwan)

TAIWAN TELEVISION ENTERPRISE (Comm.)
Addr: 990 Chung Cheng Rd, Taipei. **Te:** 48685. **Cable:** Television. **L.P:** Pres: Th. S. Chou. Dir. Eng. Dept: R. L. C. Huang. Dir. Prgr: Yi-mou Ho. Dir. Sales: Mou-yu Kuan.
Station: BET21 chA7 70/14kW H (+2 satellites) – **D.Prgr:** W 04.30–05.15, 09.30–15.30. Sun 04.30–07.30, 09.30–15.30 – **TV sets:** 120.000.

NATIONAL EDUCATIONAL TV-STATION (Gov.)

Addr: 41 Nan-hai Rd,Taipei. **Te:** 36166 – **L.P:** Dir. Prgr: H. Y. Lee. Dir. Tec: T. C. Yü. Dir. Foreign Rel: D.H. Lin – **Station:** BET31 chA 11 4/2kW – **D.Prgr:** 06.00–08.00. Planned 8 low-powered repeater st's.

CYPRUS

CYPRUS BROADCASTING CORPORATION (Gov, subsidis.)

Addr: P.O. Box 1824, Nicosia – **L.P:** Dir. Prgr's: G. Mitsides. For other personnel: see radio – **Stations:** Mt. Olympus chE6 40/8kW V – Mt. Sina Oros: chE8 40/8kW V – **D.Prgr:** 17.30–20.30 – **TV sets:** 25.000 – **ALF:** £ 3–0–0.

HONG KONG

REDIFFUSION TV HONG-KONG (Comm.)

Addr: P.O. Box 121, Hong Kong – Closed circuit 405 line netw – **L.P:** see radio – Two simultaneous wired netw's – **D.Prgr:** Chinese 10.00–15.00. English 09.00(Sat, Sun 06.00)–15.30.
TV sets: 61.000 – **ALF:** HK $ 36.00 per month.

INDIA

ALL INDIA RADIO – TELEVISION (Gov.)

Addr: Television Centre, All India Radio, Akashwani Bhawan, 5th Floor, Parliament St, New Delhi-1. **Te:** 30101. **Cable:** Durdarshan. **L.P:** Dir: S. N. Murti. Eng-in-charge: C. R. Krishnamurthy.
Station: New Delhi chE4 5/1kW H – **D.Prgr** (Gen. Sce): 13.30–15.00 – For schools: May–March: Lessons in Chemistry and Physics for Higher Secondary Classes; Lessons in General Science for class 7th and 8th; lessons in English for class 6th, 7th and 8th; and lessons in Social Studies for class 8th only. Besides, Teachers Training Prgr's in English and Science, at least once a month – **Pub:** School Television Pamphlet (English) annual – **F.Pl:** St's at Bombay, Calcutta, Madras & Kanpur – **TV sets:** 6.000 – **ALF:** Rs 30,– (for Schools & teleclubs Rs 10,–).

INDONESIA

TV REPUBLIK INDONESIA (Gov.)

Addr: Jajasan Televisi RI, Senajan, Djakarta. **Te:** 71160. **Cable:** Telviri – **L.P:** Gen. Mgr: M. Arief. Dir. of Prgr: S. Soegito. Dir. Tec: Ir. Soemartono. Dir. of Adm: Drs. Sumadi – **Station:** Djakarta chE9 10/2kW H – Jogjakarta chE8 5/1kW H.
D.Prgr: 12.00–15.00(Sat 16.00) – **Ad:** 18. min's daily – **TV sets:** 42.500.

IRAN

TELEVISION OF IRAN (Comm.)

Addr: Box 1015, Av. Pahlavi, Tehran, **Te:** 621101. **Cable:** Televiran – **L.P:** St. Mgr: Dr. K. Mahmondi. Dir. Tec: G. Naderi. **Stations:** Teheran chA3 4/0.8kW H – Abadan chA3 12/2.4kW – Ahwaz chA12 0.5kW (rel. Abadan) – **D.Prgr's:** 12.30–19.30. **TV-sets:** 130.000

IRAQ

BAGHDAD TELEVISION (Gov.)

Addr: Ministry of Guidance, Broadc. House, Salhiya, Bagdad. **L.P:** Dir: A.Al-Sammarie. **Stations:** Salhiya chE8 5/1kW H – **D.Prgr:** 07.00–08.00, 15.00–21.00. **Projected st's** (repeaters): Basra, Kirkuk, Mosul – **TV sets:** 125.000.

ISRAEL

INSTRUCTIONAL TELEVISION TRUST (Educ.)

Addr: 14 Klausner St, Tel Aviv. **Te:** 445141 – **L.P:** Gen. Mgr: M. Rowe. Dir. Tec: Dr. Y. Peless.
Station (CCIR system B): Eitanim chE8 20kW H – **D.Prgr:** Mon–Thurs 06.00–09.00, 11.00–12.30 – **TV sets:** 30.000 – **ALF:** Il 75,–.

JAPAN

NIPPON HOSO KYOKAI

(Public Corporation, non Gov, non-Comm.)
Monocrome and Color-TV:
Stations: NHK operates two nationwide TV networks: General and Educ. As of Sep, 1st 1966 there is a total of 830 st's; 420 General TV netw. and 410 for the Educ. TV netw.

Call: JO-TV. **Po:** H exc. Kainan st. V – **Ch:** J – **Def:** 525 – **Color-TV:** 416 st's for General netw. and 406 for Educ. netw. operate Color broadcast . System: NTSC. [1]=General Sce. [2]=Educ. Sce.

Call	ch	kW/W
°) **Sapporo**		
[1]) IK	3	10
[2]) IB	12	10
Kitafukuoka		
[1]) –	5	250W
[2]) –	12	250W
Fukui		
[1]) FG	9	3
[2]) FC	3	3
Tokushima		
[1]) XK	3	1
Hakodate		
[1]) VK	4	1
[2]) VB	10	1
Asahikawa		
[1]) CG	9	1
[2]) CC	2	1
Wakkanai		
[1]) –	9	250W
[2]) –	2	250W
Nayoro		
[1]) –	4	250W
[2]) –	12	250W
Obihiro		
[1]) OG	4	1
[2]) OC	12	1
Kushiro		
[1]) PG	9	1
[2]) PC	2	1
Nakashibetsu		
[1]) –	4	250W
[2]) –	12	250W
Kitami		
[1]) KP	3	1
[2]) KD	12	1
Muroran		
[1]) IU	9	1
[2]) IT	2	1
°) **Sendai**		
[1]) HK	3	10
[2]) HB	5	10
Akita		
[2]) UK	9	5
[1]) UB	2	5
Yamagata		
[1]) JG	8	3
[2]) JC	4	3
Tsuruoka		
[1]) JP	3	1
[2]) JD	6	1
Morioka		
[1]) QG	4	3
[2]) QC	8	3
Kamaishi		
[1]) –	2	250W
[2]) –	12	250W
Fukushima		
[1]) FP	9	3
[2]) FD	2	3
Wakamatsu		
[1]) HT	1	1
[2]) HY	3	1
Aomori		
[1]) TG	3	5
[2]) TC	5	5
Hachinohe		
[1]) –	9	500W
[2]) –	7	500W
*) **Tokyo**		
[1]) AK	1	50
[2]) AB	3	50
Nijima		
[1]) –	52	300W
[2]) –	50	300W
Kofu		
[1]) KG	1	3
[2]) KC	3	3
Fujiyoshida		
[1]) –	9	250W
[2]) –	2	250W
Nagano		
[1]) NK	2	1
[2]) NB	9	1
Iida		
[1]) –	4	250W
[2]) –	3	250W
Nigata		
[1]) QK	8	5
[2]) QB	12	5
Nagoya		
[1]) CK	3	10
[2]) CB	9	10
Shizuoka		
[1]) PK	9	1
[2]) PB	2	1
Hamamatsu		
[1]) DG	4	1
[2]) DC	8	1
Kanazawa		
[1]) JK	4	3
[2]) JB	8	3
Toyama		
[1]) IG	3	3
[2]) IC	10	3
°) **Osaka**		
[1]) BK	2	10
[2]) BB	12	10
Fukuchiyama		
[1]) –	49	300W
[2]) –	46	300W
°) **Hiroshima**		
[1]) FK	3	10
[2]) FB	7	10
Onomichi		
[1]) DP	1	1
[2]) DD	7	1
Okayama		
[1]) KK	5	10
[2]) KB	3	10
Matsue		
[1]) TK	6	1
[2]) TB	12	1
Hamada		
[1]) –	2	500W
[2]) –	9	500W
Tottori		
[1]) LG	3	1
[2]) LC	4	1
Yamaguchi		
[1]) UG	9	1
[2]) UC	1	1
Matsuyama		
[1]) ZK	6	5
[2]) ZB	2	5
Nihama		
[1]) ZQ	2	250W
[2]) –	4	250W
Yawatahama		
[1]) –	8	250W
[2]) –	2	250W
Kochi		
[1]) RK	4	1
[2]) RB	6	1
Nakamura		
[1]) –	1	250W
[2]) –	11	250W
°) **Kumamoto**		
[1]) GK	9	1
[2]) GB	2	1
Minamata		
[1]) –	5	500W
[2]) –	1	500W
°) **Fukuoka**		
[1]) LK	3	10
[2]) LB	6	10
Izuhara		
[1]) –	5	300W
[2]) –	11	300W
Kurume		
[1]) –	46	300W
[2]) –	54	300W
Gonoura		
[1]) –	59	300W
[2]) –	56	300W
Kitakyushu		
[1]) SK	6	1
[2]) SB	12	1
Nagasaki		
[1]) AG	3	1
[2]) AC	1	1
Sasebo		
[1]) AT	8	1
[2]) AY	2	1
Kagoshima		
[1]) HG	3	5
[2]) HC	5	5
Naze		
[1]) –	3	250W
[2]) –	4	250W
Setouchi		
[1]) –	6	500W
[2]) –	10	500W
Miyazaki		
[1]) MG	8	1
[2]) MC	12	1
Nobeoka		
[1]) –	4	250W
[2]) –	2	250W
Oita		
[1]) IP	3	3
[2]) ID	12	3
Imari		
[1]) –	51	300W
[2]) –	53	300W

+ 701s t's below 250Watt not mentioned.

D.Prgr: Gen-TV: 21.00–14.55. Educ-TV: W 22.00–08.00, 09.00–14.55. Sat/Sun 22.00–06.00, 09.00–14.55.
Color TV: Gen-TV: 26 hrs (weekly), Educ-TV: 18 hrs (weekly).
TV sets: 18.483.296 – **ALF:** 3960 Yen.

PRIVATELY OWNED COMMERCIAL TV-STATIONS

Call: JO-TV chJ. *=St's with colour facilities; 525 lines.
D.Prgr: General (approx) W: 23.00–24.00 or from 02.00–05.00, 08.00–15.00. Sun approx. 23.00 (or from 00.00–)–15.00.

	Call	ch	kW(ERP)	Name
1)	HR	1	10/2.5 ⎫	Hokkaido Broadc. Comp, Sapporo:
1)	–	1	1/0.25 ⎭	21.50–14.50
2)	FX	1*	2.5	Tokai Television Broadc. Co, Nagoya: 22.20–15.40
3)	EL	1	1/0.25	Tsuruoka
4)	IR	1	10/2.5	Tohoku Broadc. Co, Sendai
5)	LR	1	3/0.75	Kita-Nihon Broadc. Co, Toyama
6)	IF	1	10/2.5	Kyushu Asahi Broadc. Co, Fukuoka
7)	CF	1	5/1.25	R. Minami-Nihon Broadc. Co, Kagoshima
8)	JR	1*	1/0.25	Shikoku Broadc. Co.
9)	GR	1	5/1.25	R. Aomori Broadc. Co, Aomori: 21.45–14.00 (Sat 16.30)
10)	JX	1	1/0.25	Nihon-Kai Telecasting Co, Tottori
11)	AX	4*	50/12.5	Nippon TV-Network Co, Tokyo: 21.40–15.00(Sat 16.30)
12)	FR	4	10/2.5	RKB Mainichi Broadc. Co, Fukuoka
13)	OR	4	10/2.5	MBS Mainichi Broadc. System, Osaka: 21.30–16.00
14)	ER	4	10/2.5	R. Chugoku Broadc. Co, Hiroshima: 21.50–15.00
15)	PM	4	1/0.25	Shimonoseki
16)	AR	5*	10/2.5	Chubu-Nippon Broadc. Co, Nagoya: 21.55–16.45 (Sun 22.20–15.30)
17)	DR	5*	5/1.25	Broadc. System of Niigata, Niigata
18)	KX	5	100/25	Sapporo TV Broadc. Co, Sapporo
19)	JF	5*	3/0.75	Yamanashi Broadc. System
20)	GF	5	3/0.75	R. Oita Broadc. Co, Oita

Call	ch	kW(ERP)	Name
21) UR	5	1	Nagasaki Broadc. Co, Nagasaki
22) DF	6	3	Iwate Broadc. Co. Morioka
23) KR	6*	50/12.5	Tokyo Broadc. System: 21.15–17.12 (Sun 22.20–16.25)
24) NR	6*	10/2.5	Asahi Broadc. Corp: 21.00–15.30
25) MR	6*	3/0.75	Hokuriku Broadc. Co, Kanazawa
26) VO	6	1/0.25	Hamamatsu
1) –	6	1/0.25	Kushiro
1) HO	6	1/0.25	Hakodate
1) HW	6	1/0.25	Obihiro
27) PY	6	1/0.25	Wakamatsu
18) KY	7	1/0.25	Asahikawa
18) LY	7	1/0.25	Muroran
18) SY	7	1/0.25	Kushiro
28) DX	8*	100/25	Kansai Telecasting Corp, Osaka: 21.30–15.55(Sat 16.30)
12) FO	8	1/0.25	Yahata
29) CX	8*	50/12.5	Fuji Telecasting Co: 22.00–15.00
30) ZR	8	1	R. Kochi Broadc. Co, Kochi
31) KF	9*	10/2.5	Nishi-Nippon Broadc. Co, Takamatsu
32) AF	10*	5/1.25	Nankai Broadc. Co, Matsuyama
3) EF	10	3/0.75	Yamagata Broadc. Co, Yamagata
33) IX	10*	10	Yomiuri TV Broadc. Corp, Osaka
34) HF	10	10/2.5	San In Broadc. System, Yonago
35) EX	10	50/12.5	NET TV Netw. 21.40–14.45
36) HX	10	1/0.25	Nishi Nippon TV Corp, Kita Kyushu
37) NF	10	1/0.25	Miyazaki Broadc. Co, Miyazaki
14) EE	10	1/0.25	Onomichi
18) WL	10	1/0.25	Obihiro
21) MF	10	1	Sasebo
38) YR	11	10/2.5	Sanyo Broadc. Co, Okayama
39) TR	11	5/1.25	Akita Broadc. System, Akita
40) PR	11*	3/0.75	Fukui Broadc. Co, Fukui
41) SR	11*	1/0.25	Shinetsu Broadc. Co, Nagano
1) HE	11	1/0.25	Asahikawa
1) QF	11	1/0.25	Muroran
15) PF	11	1	Yamaguchi Broadc. Co, Tokyuama
26) VR	11*	1/0.25	Shizuoka Broadc. System, Shizuoka
42) BF	11	1	Kumamoto Broadc. Co, Kumamoto
27) PX	11	3	Fukushima Television Broadc. Co.
43) LX	11	10/2.5	Nagoya Broadc. Co. Nagoya: 22.00–15.00
18) KZ	12	1/0.25	Hakodate
44) NX	12	10/2.5	Hiroshima Television Hiroshima
44) NY	12	1/0.25	Onomichi
45) TX	12	50/12.5	Japan Science Foundation, Tokyo
46) OX	12*	10/2.5	Sendai Broadc. Co.

1) North 1, West 5, Sapporo. **L.P:** Pres: S. Abe. Dir. Tec: K. Kamo. (13 low power st's not mentioned) – 2) 7 Toschin-cho, Higashi-ku, Nagoya. **L.P:** Pres: I. Oshima. St. Mgr: S. Yamaguchi. Dir. Tec: M. Nakayama (11 satellites) – 3) 5, 2 chome, Hatagomachi, Yamagata (3 satellites) – 4) 141, Nibancho, Higashi, Sendai (3 satellites) – 5) 10–18 Ushijima, Toyama – 6) 6, 1-chome, Nagahamacho, Fukuoka (3 satellites) – 7) 17, Koraicho, Kagoshima (2 satellites) – 8) 32, 1-chome, Saiwaicho, Tokushima (5 satellites) – 9) 72 Fukuda, Matsumori, Aomori City (5 satellites) – 10) 2, 3-chome, Honmachi, Tottori (4 satellites).
11) 14 Niban-cho, Chiyoda-ku, Tokyo. **L.P:** Chmn: M. Shoriki. Pres: Y. Shimizu. Man. Dir: D. Fukui. Dir. Tec: M. Yoshikawa (7 satellites) – 12) 4, Watanabetori, Fukuoka – 13) Dojima, Kitaku, Osaka – 14) Motomachi 34, Hiroshima. **L.P:** Dir. Tec: T. Watanabe (10 satellites) – 15) Koenku, Tokuyama – 16) 4–15 Shinsakae-machi, Naka-ku, Nagoya. **L.P:** Dir: K. Igushi (9 satellites) – 17) 18, 3-chome, Kawagishicho, Niigata (9 satellites) – 18) 11, 1-chome, Nishi, Sapporo. **L.P:** St. Mgr: Hagiwara. Dir. Tec: S. Ito. Film Buyer: R. Kaji – 19) 288, Hyakokucho, Kofu (7 satellites) – 20) 5-1315, Imazuru, Oita (7 satellites) – 21) 1-35 Kamimachi, Nagasaki (7 satellites) – 22) 1-57 Uchimaru, Morioka City (8 satellites).
23) 36 Hitotsugicho, Aaksaka, Minato-ku, Tokyo. **L.P:** Chmn: T. Adachi. Pres: J. Imamichi. Dir. Prgr: N. Omori. Dir. Engineering: M. Yoshida (2 relay st's).
24) Asahi Broadc. Corp, TV Station, Dojima, Kitaku, Osaka. **Te:** 361-1181. **Cable:** Jonrtv. **L.P:** see radio. Color TV 2 hrs weekly – 25) 128 Takaokamachi. Kanazawa (4 satellites) – 26) 46, Konoyamachi, Shizuoka (18 satellites) – 27) 48 Miyama-cho, Fukushima (6 satellites).
28) 51 Umegae-cho, Kitaku, Osaka. **L.P:** St. Mgr: Y. Sawamura. Dir. Tec: K. Hirabayashi. Dir. Prgr's: K. Shibata. Film buyer: N. Makihata.
29) 7, Kawadacho, Sinjuku-ku, Tokyo. **L.P:** Chmn: S. Mizuno. Pres: N. Shikanai. Film Buyer: M. Kataoka. Dir. Tec: E. Nishiyama (10 satellites) – 30) 23 Honmachi, Kochi (30 satellites) – 31) 2-8 Marunouchi, Takamatsu – 32) 30-1, Masakimachi, Matsuyama (5 satellites).
33) 74, 2-chome, Iwai-cho, Kitaku, Osaka. **L.P:** St. Mgr: T. Okano. Dir. Tec: R. Kimura. Dir. Prgr(Film Buyer): Y. Tanaka – 34) 423 Nishi-Fukuhara, Yonago (12 satellites).
35) 55, Azabuzaimokucho, Minato-ku, Tokyo. **L.P:** Chmn: Y. Akao. Pres: N. Yamauchi. Man. Dir: N. Mutoh. Dir. Tec: M. Iwamoto (7 satellites+15 projected) – 36) Yahataku, Kita Kyushu (3 satellites).
37) 858, Shimo, Kitakatamachi, Miyazaki (4 satellites) – 38) 3-28, Uchisange, Okayama (7 satellites) – 39) Sanno-Ohdori, Akita (5 satellites) – 40) 35, Otemachi, Fukui (7 satellites) – 41) 1, 132 Yoshidamachi, Nagano (18 satellites) – 42) 30, Yamasakimachi, Kumamoto (10 satellites) – 43) 11-5 Minami Otsudori, Nagoya (7 satellites) – 44) 1-1, Shimonakamachi, Hiroshima (9 satellites) – 45) 2, Daikan-cho, Chiyodaku, Tokyo. **L.P:** Chmn: C. Kurata – 46) Shin-Sendai Bldg, Sendai (3 satellites).

JORDAN

Gov. st's planned in Amman & Jerusalem.

KOREA (Rep.)

SEOUL TELEVISION STATION (Gov.)

Addr: 33, 3ka, Yejang-Dong. Chung-ku, Seoul. **Te:** 8-4127. **L.P:** St. Mgr: J. Y. Kim. Dir. Tec: N.S. Park. Dir. Prgr: I. K. Choi: **Station:** Seoul chA9 13.4/6.7kW H. **D.Prgr:** 08.30–14.40. **TV sets.** 58.000.

JOONGANG BROADCASTING SYSTEM

Addr: 58-9 Seosomun-dong, Seoul. **Te:** 916165. **Cable:** JBS. **L.P:** Pres: H.B. Lee. Pres: J.K. Hong. Man. Dir: H.O. Chung. Exec. Dir: D.P. Kun. **Stations:** Seoul(HLCE) chA7 2/1kW – Pusan(HLKE) chA9 0.5/0.25kW – **D.Prgr:** 08.30(Sat 04.30, Sun 01.00)–14.15.

AMERICAN FORCES KOREA NETWORK (US Gov, Funds)

Addr: APO 96301, San Francisco, Calif, USA. **Te:** Yongsan 2495 – **L.P:** se radio.
Stations: Pol=H. *=separate film chain.
Seoul chA2 5kW – Hwaakson chA12 0.5kW – Kunsan chA2 0.12kW – Taegu chA6 0.5kW – Taejon chA12 0.05kW – *Pusan chA2 0.12kW – Pajuri chA4 0.05kW.
D.Prgr: 08.00(Sat 01.30, Sun 00.00)–16.00.

KUWAIT

TELEVISION OF KUWAIT (Gov.)

Addr: P.O. Box 193, Kuwait. **Te:** 39411. **Cable:** Alirshad – **L.P:** Dir. TV: J. Hassoun. For other personnel: see radio. – **Stations:** Dasman chE8 0.1kW H – Mutlaa chE10 2/10kW H – Rawdatein chE6 2kW H – **Projected:** So. Repeater chE8.
D.Prgr: 15.30–20.30. **Test-tr's:** 12.00–14.00, 15.00–15.30 – TV sets: 40.000.

LEBANON

COMPAGNIE LIBANAISE DE TELEVISION (Comm.)

Addr: B.P. 4848, Beirut – **L.P:** Pres. & Dir. Gen: Gen. S. Nofal. Vice Dir. Gen: B. M. Givadinovitch. Dir. Tec: N. Loutfi. Prgr's: W. Ezzedine.
Stations: Beirut 5kW: chE7 (Arabic), chE9 (French/English) – Fih (No. Lebanon) 1.2kW V: chE2 (relay chE7) – Maasser el Chouf 60kW H: chE4 (relay chE7 & E9).
D.Prgr: 16.00–21.00(both channels) – **Pub:** TV Magazine (weekly) – **TV sets:** 165.000.

TELE ORIENT (Comm.)

Addr: Box 5054, Beirut. **Te:** 284100. **Cable:** Telibor.
Station: chE11 100/20kW H – chE5 2.5/0.5kW H.
D.Prgr: 16.00–21.00 in Arabic, English, French.

MALAYSIA

MALAYSIAN TELEVISION SERVICE (Gov.)

Addr: Dep. of Television, c/o Dewan Tunku Abdul Rahman, Ampang Rd, Kuala Lumpur. **Te:** 23181. **Cable:** Tivimalaya – **L.P:** Dir: Ow Kheng Law. Head of Prgr: R. I. bin Raja Zahid. Eng. in charge: K. K. Loh – **Stations:** (System B 625 lines): Kuala Lumpur ch10 10/4kW H – Kuala Lumpur ch5 & 8 100/10kW – **D.Prgr:** 11.30–15.30 **TV sets:** 65.000.

PAKISTAN

TELEVISION PROMOTERS COMPANY LTD (Semi-autonomous)

Addr: Rawalpindi, Pakistan – **L.P:** Exec. Dir: A. Qayyum. Chief Eng: S. A. Aziz. St. Mgr: A. B. Ahmed (Lahore), A. F. Kalimullah (Dacca).
Stations (System B 625 lines):
Lahore chE9 5/1.25kW H – Dacca chE9 5/1.25kW H – Karachi chE4 30kW – Islamabad chE4 30kW – **D.Prgr:** 13.00–16.30
Projected: Peshawar chE3, Chittagong chE5 Dec. 1967.
TV-sets: 2.700.

PHILIPPINES

DEPT. OF PUBLIC WORKS AND COMMUNICATIONS.

Radio Control Office, Manila.
Stations:

Call	ch	kW(ERP)	Location
1) DYCB-TV	A3	2/0.5	Cebu City
1) DZAQ-TV	A3	10/5	Quezon City
2) DYXL-TV	A4	2/1	Bacolod City
3) DZTM-TV	A5	10/5	San Juan, Rizal
1) DZRT-TV	A6	10/0.5W	Dagupan City
4) DYSS-TV	A7	0.1/0.05	Cebu City
4) DZBB-TV	A7	5/2.5	Quezon City
2) DZXL-TV	A9	5/2.5	Quezon City
5) DZRH-TV	A11	5/2.5	Quezon City
6) DZBS-TV	A12	0.5/0.125	Baguio City
7) DY-TV	A13	2.24/1.12	Cebu City
7) DZ-TV	A13	6/2.5	San Juan, Rizal
7) DX-TV	A13	0.5/0.25	Davao-City
8) DZFU-TV	A14	0.4/0.2	Manila

1) **Bolinao Electronics Corp**, CBN Bldg, Intramuras, Manila. **D.Prgr:** Quezon City: 23.00–16.00. Cebu City: 04.00–16.00. Dagupan City: 12.00–15.00.
2) **Chronicle Broadc. Network**, CBN Bldg, Intramuras, Manila, **D.Prgr:** 01.00–16.00.
3) **The Manila Times Publishing Co**, TVT Bldg, Florentino, Torres, Manila. **L.P:** St. Mgr: R. Diez. **D.Prgr:** 09.00–16.00.
4) **Loreto F. de Hemedes**, RBS Bldg, Diliman, Quezon City. **D.Prgr:** Cebu City: 09.00–15.30. Quezon City: 23.00–16.00.
5) **Metropolitan Broadc. Co**, 964 Taft Avenue, Manila. **D.Prgr:** 08.00–15.00.
6) **R. Philippine Network Inc**, 1195 Florida St, Ermita, Manila **D.Prgr:** 09.00–13.00.
7) **Inter Island Broadc. Corp**, Phil. Herald Bldg, Intramuros, Manila. **D.Prgr:** DYTV: 08.00–14.00; DZTV: 07.00–14.30; DXTV: 07.00–15.00.
8) **Feati University**, Helios St, Sta. Cruz, Manila. **D.Prgr:** 02.00–15.00.
TV sets: 160.000.

RYUKYU ISLANDS

RYUKYUS BROADCASTING CORPORATION (Comm.)

Addr: CPO Box 4, Naha, Okinawa – **L.P:** see radio.
Station: KSAR-TV chA12 5/1.25kW. **D.Prgr's:** 03.00–15.00 in Japanese & English. **TV sets:** 130.000.

OKINAWA TELEVISION BROADC. LTD. (Comm.) – Addr:

1-chrome, Matsuyamacho, Naha, Okinawa – **L.P:** Pres: T. Guschichan – **Station:** KSDW-TV chA10 5/2kW – **D.Prgr:** 03.00–15.00 in Japanese, English.

SAUDI ARABIA

MINISTRY OF INFORMATION (Gov).

Addr: Airport Rd, Jeddah – **L.P:** see radio.
Stations (System B 625 lines): Jeddah chE10 20/4kW H – Riaydh chE5 20/4kW H – **D.Prgr's:** 3 hrs daily (approx).

ARAMCO-TV (Non-comm, private Co.)

Addr: Box 1359, Dharan. **Te:** 3061. **Cable:** Aramco – **L.P:** Producer: S. A. Al-Mozaini. Asst. Producer: S. M. Kubeisy. Chief Eng: L. R. Wilson.
Stations: chA2 12/6kW – chA13 0.5/0.25kW – **D.Prgr:** Sign on approx. 16.00 Prgr. time: Sat-Tues 4½ hrs, Wed/Fri 5½ hrs, Thurs 6½ hrs (times vary with Sun) – **Pub:** weekly schedule.
TV sets: 25.000.

SINGAPORE

TELEVISION SINGAPURA (Gov).

Addr: P.O. Box 1902, Singapore – **L.P:** see radio – **Stations:** Bukit Batok: chE5 (Singapore 1), chE8 (Singapore II) 16kW – **D.Prgr:** chE5 Mon–Fri 10.30–16.00, Sat/Sun 05.30–16.00; chE8 11.20–14.45
TV sets: 75.495 – **ALF:** $ 36.00.

SYRIA

SYRIAN TELEVISION SERVICE (Gov.) – Addr:

Ommayyad Square, Damascus – **L.P:** see radio.
Stations: Damascus chE5 150/30kW, Homs chE7 30/6kW, Sheikh Dahor chE9 0.3/0.06kW, Aleppo chE5 30/6kW, Saraukhiyah chE8 2.25/0.45kW – **D.Prgr:** 16.00–22.00.
TV sets: 63.000.

THAILAND

TELEVISION OF THAILAND (Gov.)

Addr: Public Relations Dept, Bangkok – **L.P:** Gen. Mgr: K. Punnakanta. Asst. Gen. Mgr: I. Kanchanakuha. Dir. Tec: Ch. Tandakaseya. Chief Eng: Dr. T. Meksawan.
Stations: Lampang ch8 3kW, Khankhaen ch5 6kW, Haadyai ch9 1kW, Chiengmai (relay) ch8 – **D.Prgr:** ch8 12.00–17.00, ch5 11.00–17.00, ch9 11.30–16.30 – **F.Pl:** Nationwide netw. – **TV sets:** 187.382.

THAI TELEVISION CO. LTD (Semi Gov, Comm.)

Addr: Mansion B. Rajdamnern Ave, Bangkok. **Te:** 22273. **Cable:** Thaitevi.
L.P: Dir. Gen: Lt. Gen: K. Punagunta. Gen. Mgr: & Film Buyer: P. Hongsanand. Dir. Tec: A. Pojanapisute. Dir. Prgr: Ch. Rangsikul.
Stations (System RCA): Bangkok chA4 29/14.5kW H – **Relay st's:** Khonkaen chA5 33/16.5kW H, Lampang chA8 21.4/10.7kW H, Hadyai chA9 10.7/5.35kW H – **D.Prgr:** 10.00–17.00, Sat/Sun also 03.00–09.00.

THE ARMY TELEVISION HSA-TV (Gov.)

Addr: Paholyotin Rd, Bangkok. **Te:** 70428 – **Stations:** Bangkok chA7 5kW V. Relay st: Saraburi chA5 – **D.Prgr:** D 10.15–16.15. Sat also 01.00–06.00, Sun also 02.00–06.00. This st. broadc. to the public as an ordinary tv-st.

TURKEY

ISTANBUL TEKNIK UNIVERSITESI (Gov. exp.)

Addr: Elektrik Fakültesi, Yüsek Frekans Teknigi Kürsüsü, Istanbul. **Te:** 482250 – **L.P:** Prof. Dr. A. Ataman – **Station:** chE4 50W H – **D.Prgr:** Thurs 14.00–18.00 during the Academic Year.

TURKISH RADIO & TV (TRT)

Addr. & L.P: see radio – **Projected st's** (1968–1972): Ankara ch3 100kW, Istanbul ch4 100kW, Bursa ch2 60kW, Izmir ch3 100kW, Kanya ch10 30 kW, Adana ch4 30kW – TV studio in Ankara is complete. **TV sets:** 2.500.

PACIFIC

AUSTRALIA (Commonwealth of)

Standards: Def. 625 – Picture freq: 25 – Ch width: 7Mc FM.

AUSTRALIAN BROADCASTING COMMISSION (ABC)

National Television is controlled by the Australian Broadcasting Commission, which is responsible to the Postmaster-General, whose department controls the transmitters – **Addr:** Box 487, GPO, Sydney – **L.P:** see radio.
Stations: One each in Sydney (ABN), Melbourne (ABV), Brisbane (ABQ), Adelaide (ABS), Perth (ABW) and Hobart (ABT), Canberra (ABC). Operate on Australian ch2 on 63-70Mc 100/20kW exc. ABC Canberra ch3. **Po:** H exc. Canberra V.
ABHN Newcastle ch5, H – ABEV Bendigo ch1, V – ABRV Ballarat ch3, H – ABNT Launceston ch3, H – ABDQ Toowoomba ch3, H – ABWN Wollongong ch5A, H – ABCN Orange ch1, V – ABLV Latrobe Valley ch4, H – ABGV Goulbourn Valley ch3, V – ABRQ Rockhampton ch3, H – ABRN Richmond Tweed ch6, H – ABTQ Townsville ch3, H – ABNS Pt. Pirie ch1, V – ABMN Wagga Wagga ch0, H – ABAV Albury ch1, H – ABSW Bunbury ch5, H – ABDN Grafton-Kempsey ch2, H – ABSV Swan Hill ch2, V – ABWQ Maryborough ch6, V – ABUN Tamworth ch7, H – ABMV Mildura ch4, H – ABGS Mt. Gambier ch1, H – ABLN Broken Hill ch2, V – ABTN Taree ch1, V – ABCW Northam ch4, H – ABGN Griffith ch7, H – ABSQ Warwick ch1, H – ABAW Albany ch2, V – ABNQ Cairns ch9, H – ABSN Bega-Cooma ch8, V – ABQN Dubbo ch5, V.
D.Prgr's: Mon–Fri 01.30–01.50, 04.00–04.50, 06.45–13.00; Sat 03.30–13.00; Sun 01.00–02.15 (fortnightly church service), 03.00–12.50.
TV sets: 2 248.293 – **ALF:** A$ 12.00.

PRIVATELY OWNED COMMERCIAL TELEVISION STATIONS

Federation of Australian Commercial Television Stations, Suite 404, 4th Floor, Caltex House, Sydney. **Te:** 27-8151. **Cable:** Telefed – **L.P:** Gen. Mgr: A. S. Cowan. Exec. Asst: A. B. Simpson. **Adv.** accepted under conditions of Australian Broadc. Control Board – **Stations:** The first two letters are an abbreviation of the name of the licence, the third indicates the state and the numeral signifies the channel.
All st's 100/20kW; H=Horizontal Pol. V=Vertical Pol.

1) ATVO(H)	11) ADS7(H)	21) RTN8(H)	31) MTN9(H)
2) TVQO(H)	12) TVW7(H)	22) BCV8(V)	32) NWS9(H)
3) NBN3(H)	13) HSV7(H)	23) WBQ8(V)	33) NEN9(H)
4) RVN2(H)	14) ATN7(H)	24) STV8(H)	34) GLV10(H)
5) WIN4(H)	15) BTQ7(H)	25) SES8(H)	7) DDQ10(H)
6) AMV4(H)	16) CTC7(V)	26) STW9(H)	35) TEN10(H)
7) SDQ4(H)	17) RTQ7(H)	27) TCN9(H)	36) SAS10(H)
8) TVT6(H)	18) TNQ7(H)	28) GTV9(H)	37) NRN11(H)
9) BTV6(H)	19) ECN8(V)	29) QTQ9(H)	
10) GMV6(V)	20) CBN8(V)	30) TNT9(H)	

1) **Austarama TV Pty Ltd**, P.O. Box 42, Nunawading, Vic, **Te:** 2326211. **Cable:** Austarama. **L.P:** Gen. Mgr: L. A. Mauger. Dir. Tec: G. Dawey. **D.Prgr:** Mon–Fri 05.00–13.15, Sat 06.30–13.30, Sun 05.30–13.00.

2) **Universal Telecasters Qld. Ltd**, Sir Samuel Griffiths Dr, Mt. Cootha. **Te:** 36-0366. **L.P:** Gen. Mgr. & Film Buyer: N. Carlyon. Dir. Tec: J. C. Stevenson. **D.Prgr:** 05.00–13.00.

3) **Newcastle Broadc. & TV Corp. Ltd**, P.O. Box 750, Mosbri Crescent, Newcastle. **Te:** 20321. **Cable:** Chantree. **L.P:** Gen. Mgr. & Film Buyer: K. Stone. Dir. Tec: H. J. McPhee. **D.Prgr:** Mon–Fri 02.30–13.30, Sat 03.00–14.00, Sun 03.00–12.30.

4) **Riverina TV Ltd**, P.O. Box 69, Wagga Wagga. **Te:** 2088. **Cable:** Rivtel. **L.P:** Mgr. & Film Buyer: W. P. Marsden. Dir. Tec: S. McDonald. **D.Prgr:** 06.50(Wed 02.30)–12.30.

5) **TV Wollongong Transmission Ltd**, P.O. Box 500, Wollongong. **Te:** B-6444. **Cable:** Winteevee. **L.P:** St. Mgr: W. Lean. Dir. Tec: K. Roberts. **D.Prgr:** 04.00(Sat 05.15, Sun 05.00)–13.00.

6) **Albury Upper Murray TV Ltd**, TV-Centre, Albury, NSW. **Te:** 251494. **Cable:** Ayemfour. **L.P:** Man. Dir: A. R. Kidd. Dir. Tec: T. Jones. **D.Prgr:** 06.45(Wed 02.45)–12.45 (Fri, Sat 05.45–13.00).

7) **Darling Downs TV Ltd**, P.O. Box 34, Toowoomba. **Te:** 22288. **Cable:** Deedeeque. **L.P:** Gen. Mgr: S. J. Fitzpatrick. Dir. Tec: N. S. Hill. Film Buyer: R. A. Fry. **D.Prgr:** Mon–Fri 04.00–12.15 (or 12.45), Sat 07.00–12.15, Sun 07.00–12.30. (SDQ4=So. Downs relay st.).

8) **Tasmanian TV Ltd**, G.P.O. Box 1209M, Hobart. **Te:** 80341. **Cable:** Tasteevee. **L.P:** Man. Dir: E. G. McRae. Dir. Tec: W. Morrison. Film Buyer: D. L. Carter. **D.Prgr:** W 06.45 (Tues, Wed, Thurs 04.00)–13.00(approx), Sun 03.00–12.30.

9) **Ballarat & Western Victoria TV Ltd**, P.O. Box 464, Ballarat. **Te:** 21666. **Cable:** Beeteesix. **L.P:** Gen. Mgr: B. F. Jackson. Dir. Tec: B. Robertson. **D.Prgr:** Sun 02.00–13.50, Mon/Tues 07.00–13.10, Wed 02.00–13.10, Thurs/Fri 07.00–13.20, Sat 07.00–13.00.

10) **Goulbourn Murray TV Ltd**, P.O. Box 666, Shepparton. **L.P:** St. Mgr: P. L. Twomey. Dir. Tec: R. Abell. Film Buyer: N. Eva. **D.Prgr:** Mon/Tues/Thurs 06.30–13.00, Wed/Sun 02.00–13.00, Fri 05.30–13.45, Sat 06.45–13.30.

11) **TV Broadcasters Ltd**, 125 Strangways Terrace, No. Adelaide. **Te:** 6-8591. **Cable:** Adseven. **L.P:** Gen. Mgr: K. A. MacDonald. Dir. Tec: S. McLean. Film Buyer: N. Wawyer. **D.Prgr:** 05.00(Sat 07.00, Sun 04.30)–13.30.

12) **TVW Ltd**, P.O. Box 9, Tuart Hill, We. Australia. **Te:** 291422. **Cable:** Teleview. **L.P:** Gen. Mgr. & Film Buyer: J. W. Cruthers. Dir. Tec: J. R. Quicke. **D.Prgr:** 02.00–13.30.

13) **Herald Sun TV Pty Ltd**, Dorcas & Wells Str, So. Melbourne. **Te:** 690771. **Cable:** Hertel. **L.P:** Mgr: K. S. Cairns. Dir. Tec: J. Fisher. **D.Prgr:** 01.20–13.30(approx), Fri 01.20–15.25, Sat 00.30–14.10, Sun 01.15–13.15.

14) **Amalgamated TV Services Pty Ltd**, Television Centre, Epping, NSW. **Te:** WL 0111. **Cable:** Telecentre. Sydney. **L.P:** Gen. Mgr: J. H. Oswin. Dir. Tec: M. Stevenson. **D.Prgr:** 02.00(Sat 22.00)–14.00. Sun 01.40–13.30.

15) **Brisbane TV Ltd**, Sir Samuel Griffith Dr, Mt. Cootha. **Te:** 360111. **Cable:** Beeteeque. **L.P:** Gen. Mgr: E. F. Allen. Dir. Tec: G. Everingham. **D.Prgr:** Mon–Fri 01.00–13.00, Sat 05.00–13.15, Sun 02.00–12.45.

16) **Canberra TV Ltd**, P.O. Box 633, Canberra. **Te:** 40255. **Cable:** Ceeteecee. **L.P:** Gen. Mgr: G. K. Barlin. Dir. Tec: D. J. Stewart. Film Buyer: M. Bodley. **D.Prgr:** 06.00(Wed 02.00)–12.40 (or 13.10 approx).

17) **Rockhampton TV Ltd**, P.O. Box 568, Rockhampton. **Te:** 8877. **Cable:** Arteewue. **L.P:** St. Mgr.& Film Buyer: B. Saunders. Dir. Tec: C. Amoore. **D.Prgr:** 07.00 (Tues 04.00)–12.00 (Fri 12.30).

18) **Telecasters No. Queensland Ltd**, P.O. Box 1016, Townsville. **Te:** 6161. **Cable:** Teenq. **L.P:** Gen. Mgr. & Film Buyer: K. R. Christensen. Dir. Tec: R. M. Barton. **D.Prgr:** 07.00(Wed 03.30)–12.00.

19) **East Coast Television Ltd**, Cowper Str, Chatham, Taree, NSW. **Te:** 1100. **L.P:** Man. Dir: O. G. K. Sutherland. St. Mgr: A. W. Thompson. Dir. Tec: D. Walmsley. **D.Prgr:** 07.00–12.00.

20) **Country TV Services Ltd**, Box 465, Orange. **Te:** 621288. **Cable:** Cebtes. **L.P:** Mgr: J. E. Ridley. Dir. Tec: E. Crough. **D.Prgr:** 06.00 (Thurs 04.00)–12.30(Sat 13.00).

21) **Richmond Tweed TV Ltd**, P.O. Box 423, Lismore. **Te:** 2351. **Cable:** Richteevee. **L.P:** Man. Dir: L. T. Warrick. Dir. Tec: H. G. Green. Film Buyer: R. F. McLaren. **D.Prgr:** Mon–Thurs: 01.30–04.30, 07.00–12.30. Fri 07.00–12.30, Sat 07.30–12.30, Sun 06.30–12.30.

22) **Bendigo & Ce. Victoria Telecasters Ltd**, P.O. Box 240, Bendigo. **Te:** 30584. **Cable:** Beneight. **L.P:** Gen. Mgr. & Film Buyer: F. A. McManus. Dir. Tec: A. J. Dear. **D.Prgr:** W 06.00(Wed 02.00)–13.00 (Sat 13.30). Sun 01.30–13.00.

23) **Wide Bay Burnett Television Ltd**, P.O. Box 30, Maryborough, Qld. **L.P:** Gen. Mgr. & Film Buyer: F. T. Yates. Dir. Tec: B. Hunter. **D.Prgr:** Mon–Fri 06.55(Wed 03.55)–12.35(Mon 13.00); Sat/Sun 07.25–12.30.

24) **Sunrasia Television Ltd**, 18 Deakin Ave, Mildura, Vic. **Te:** 30216. **L.P:** Man. Dir: M. Folie. Dir. Tec: A. Stewart. **D.Prgr:** 07.45–11.30.

25) **South East Telecasters Ltd**, Box 694, Mt. Gambier, So. Australia. **Te:** 24117. **Cable:** Setel. **L.P:** Gen. Mgr: K. Bailhache. Dir. Tec: M. Hennessy. Film Buyer: D. Ford. **D.Prgr:** 08.00–12.30.

26) **Swan Television Ltd**, P.O. Box 99, Tuart Hill. **Te:** 291911. **Cable:** Swantel. **L.P:** Gen. Mgr. & Film Buyer. R. J. Mercer. Dir. Tec: V. Kitney. **D.Prgr:** 04.00–15.59.

27) **TV Corporation Ltd**, Artarmon Rd, Willoughby. **Te:** JF-0444. **Cable:** Diffusion. **L.P:** Chief Executive: B. Gyngell. Dir. Tec: L. Free. **D.Prgr:** 02.00–13.30(Sat 23.00–14.00, Sun 02.00–13.30).

28) **General TV Corporation Pty, Ltd**, P.O. Box 100, Richmond E. 1, Vic. **Te:** 42-0201. **Cable:** Geeteevee. **L.P:** St. Mgr: R. J. Biddle. Dir. Tec: Th. J. O'Donohue. Film Buyer: I. G. Holmes. **D.Prgr:** Mon–Fri 02.15–14.00, Sat 21.30–14.00, Sun 02.00–13.30.

29) **Queensland TV Ltd**, G.P.O. Box 72A, Brisbane. **Te:** 362233. **Cable:** Queteenine. **L.P:** Gen. Mgr: J. W. Mckay. Dir. Tec: P. J. Marlan. **D.Prgr:** 01.30–13.00.

30) **Northern TV Ltd**, P.O. Box 873, Launceston. **Te:** 42551. **Cable:** Netnine. **L.P:** Man. Dir: A. E. Evans. Dir. Tec: W. Freeman. **D.Prgr:** Mon 06.55–13.00, Tues 05.30–13.00, Wed 03.00–13.00, Thurs 05.00–13.00, Fri/Sat 06.45–13.00, Sun 02.30–13.00.

31) **Murrumbidgee TV Ltd**, Remenbrance Driveway, Griffith. **Te:** 1756. **L.P:** Gen. Mgr: W. Gamble. Dir. Tec: K. Callaghan. **D.Prgr:** 07.00–12.30.

32) **Southern TV Corporation Ltd**, P.O. Box 9, No. Adelaide. **Te:** 69322. **Cable:** Newsnine. **L.P:** Gen. Mgr: W. L. C. Davies. Dir. Tec: J. Batchelor. Film Buyer: R. Heading. **D.Prgr:** Sun–Fri 02.00–13.30 (Sun 13.00), Sat 06.00–14.00.

33) **TV New England Ltd**, P.O. Box 19, So. Tamworth, NSW. **Te:** 58253. **Cable:** Nenine. **L.P:** St. Mgr: K. Smith. Dir. Tec: O. Bartle. **D.Prgr:** 07.00–12.30(Sun 12.00).

34) **Gippsland Latrobe Valley Telecasters Ltd**, P.O. Box 220, Traralgon. **Te:** 71366. **L.P:** Gen. Mgr: D. W. Smith. Dir. Tec: K. Dunn. **D.Prgr:** Mon–Fri(Wed 04.00)–13.30, Sat 07.30–13.00, Sun 07.00–13.00.

35) **United Telecasters Sydney Ltd**, Cnr. Epping & Pittwater Rds, North Ryde, NSW. **Te:** 85555. **Cable:** Unitelcast. **L.P:** Gen. Mgr: A. E. R. Fox. Film Buyer: D. F. C. Fleming. **D.Prgr:** 02.30–13.15 (Sat 04.00–13.10, Sun 02.50–12.40).

36) **South Australian Telecasters Ltd**, 45 Park Terrace, Gilberton. **Te:** 656991. **Cable:** Sasten. **L.P:** Gen. Mgr & Film Buyer: D. L. Hall. Dir. Tec: P. W. Smith. **D.Prgr:** Mon–Fri 21.30–14.30, Sat/Sun 02.00–14.00.

37) **Northern Rivers Television Ltd**, P.O. Box 400, Coffs Harbour, NSW. **Te:** 1201. **L.P:** Man Dir. & Film Buyer: A. J. L. Cave. Dir. Tec: B. J. Beasley. **D.Prgr:** W 07.00(Wed 03.00)–12.30. Sun 07.00–13.00.

St's not yet operating:

38) **South Western Telecasters Ltd**, (BTW3), P.O. Box 112, Bunbury, W. A. **Te:** 2173. **L.P:** Secr: J. R. Fisher.

39) **Mackay TV Development Co. Ltd**, (MVQ6), Mackay, Qld. **L.P:** Man. Dir: E. Low.

40) **Far Northern Television Ltd**, (FNQ10), P.O. Box 596, Cairns, Qld. **L.P:** Man. Dir: W. M. Maloney.

GUAM

KUAM TELEVISION (Comm.).

Addr: P.O. Box 368, Agana. **Cable:** Kuam. **L.P:** Pres: H. Scott Killgore, Vice Pres. & Gen. Mgr: W. B. Nielsen. Res. Mgr: E. A. Olson.

Stations: chA8, A10 0.43/0.22kW V – **D.Prgr:** 07.30–14.00 (Sat 23.00–14.00) – **TV sets:** 30.000.

HAWAII

Television St's: see U.S. A. – **TV. Homes:** 166.070.

NEW CALEDONIA

OFFICE DE RADIODIFF-TELEVISION FRANCAISE

Addr: B.P. 327 Noumea. **L.P:** see radio.

Stations: (System K 625 lines): 0.05kW ch4 175.25/181.75Mc, ch6 191.25/197.75Mc, ch8 207.25/213.75Mc – **D.Prgr:** W 08.00–11.00, Sun 07.30–11.15 – **TV sets:** 3.000.

NEW ZEALAND

NEW ZEALAND BROADCASTING CORPORATION

(Statutory Public Body).

Addr: P.O. Box 98, Wellington. **Te:** 48200. **Cable:** Broadserv – **L.P:** Dir. TV: N. Palmer. For other personnel: see radio – **Stations:** Auckland AKTV ch2 100/20kW H – Wellington WNTV ch1 100/20kW H – Christchurch CHTV ch3 100/20kW H – Dunedin DNTV ch2 10/2kW H + two 100kW repeaters & 10 low powered repeaters. **D.Prgr:** Mon–Thurs 05.00–11.00, Fri 05.00–12.00, Sat 02.00–12.00, Sun 02.00–11.00 – **F.Pl:** Dunedin 50kW (ERP) + additional low powered repeaters – **Fi:** by license payments and adv. revenue Tues, Wed, Thurs, Sat – **TV sets:** 470.000 – **ALF:** £ 6-10-0.

SAMOA (American)

TELEVISION OF SAMOA (Gov.)

Addr: Dept. of Education, Pago Pago. **Te:** 2438 – **L.P:** Mgr: B.L. MacKenzie. Dir. Tec: R. Ware. **Stations:** chA2/A4/A5/A8/A10/A12/ all 50kW – Satellites: chA7/A11 0.01kW H – **D.Prgr:** 18.30–02.00 (for schools), 05.30–08.30 – **Projected:** chA13 50kW V, chA3/A6/A12 0.01kW H – TV sets 1.000

TAHITI

OFFICE DE RADIODIFF-TELEVISION FRANCAISE

Addr: B.P. 125, Papeete – **L.P:** see radio.
Stations (System K 625 lines) 0.05kW: Pic Rouge 175.25/181.75 Mc, Papeete 191.25/197.75Mc, Tataa 207.25/213.75Mc – **D.Prgr:** 04.30–07.30 – **TV sets:** 1500.

NORTH AMERICA

BERMUDA

BERMUDA RADIO & TELEVISION CO. LTD. (Comm.).

Addr: Box 452, Hamilton – **L.P:** Mgr: K. Belton.
Station (System RCA): ZBM–TV chA10 16/4kW H – **D.Prgr:** 20.00–03.15 (Thurs, Fri, Sat 04.30) – **TV sets:** 13.100.

CAPITAL BROADCASTING CO. LTD.

Addr: Box 652, Hamilton. **Te:** 2-4444. **Cable:** Capbro – **L.P:** see radio **Station:** (System PYE): ZFB-TV chA8 5kW H – **D.Prgrs:** 18.30–04.00.

CANADA

CANADIAN BROADCASTING CORPORATION

(Publicly-owned)
Abbreviations: see radio.
Addr: Nfld. Reg: CBNT, P.O. Box 5490, St. John's, Nfld. – CFSN-TV, P.O. Box 190, Stephenville, Nfld. CFLA-TV, USAF Side, Goose Bay Airport, Goose Bay, Lab. CBYT, Box 610, Corner Brook – **Quebec Reg:** CBFT, CBMT, 1425 Dorchester Str. West Montreal. CBVT, Palais Montcalm, Quebec City – **Maritime Reg:** CBHT, P.O. Box 3000, Halifax, N.S CBAFT, P.O. Box 950, Moncton, N.B. – **Prairie Reg:** CBWT, CBWFT, P.O. Box 160, Winnipeg, Man. CBXT, P.O. Box 555, Edmonton, Alta. – **B.C. Reg:** CBUT, 701 Hornby Str, Vancouver – **Ontario:** English Networks HDQ, CBLT, P.O. Box 500, Toronto – **Ottawa Area:** CBOT, CBOFT, P.O. Box 3220, Station "C", Ottawa.
L.P: Nfld. Reg: CBNT, CBYT: Dir: W. F. Galgay; Mgr. CBYT: C. V. Hierlihy – Quebec Reg: CBFT/CBMT: Asst. Gen. Mgr: French Netw: R. David. Prgr. Dir: J. Landry. Dir. Prgr. English Netw: K. Davey – CBVT: Mgr: R. Dussault. English Netw. & Toronto Area: Asst. Gen. Mgr: R. W. McGall. Maritime Reg: CBHT: Dir: S. R. Kennedy; Prgr. Dir. CBHT: K. R. Barry; CBAFT: Mgr: G. Thériault – Prairie Reg: Dir: K. Morrow. Prgr. Dir. CBWT: D. E. Cameron; CBWFT: M. Desaulniers. CBXT: R. Horley – B.C. Reg: Dir: K. P. Caple; CBUT: Prgr. Dir: E. R. Whitehouse – Ottawa Area: CBOT-CBOFT: Dir: J. Duun; Prgr. Dir: D. Townsend.

CBC Stations: Po: V – E=English Net, F=French Net – Def. 525.

Stations	Call	chA	kW(ERP)	Sce.
Montreal	CBFT	2	100/50	F
Vancouver	CBUT	2	47.8/25.4	E
Halifax	CBHT	3	56/34	E
Winnipeg	CBWT	6	100/50	E
Ottawa	CBOT	4	50.1/26.7	E
Corner Brook	CBYT	5	0.197/0.098	E
Edmonton	CBXT	5	318/159	E
Montreal	CBMT	6	100/60	E
St. John's	CBNT	8	196/98	E
Quebec	CBVT	11	173/87	F
Toronto	CBLT	6	99.5/53.5	E
Winnipeg	CBWFT	3	59/35.2	F
Stephenville	CFSN-TV	8	0.294/0.147	E
Goose Bay	CFLA-TV	8	0.87/0.435	E
Ottawa	CBOFT	9	31/17	F
Moncton	CBAFT	11	10.06/5.03	F

H of tr: approx. 15.00–06.00.
Netw. relay st's. and Rebroadcast st's. not mentioned.
TV sets: 5.000.000.

PRIVATELY OWNED COMMERCIAL TV STATIONS

Rebroadc.st's and st's less 5kW not mentioned.

Call	chA	kW	Call	chA	kW
1) CHCT-TV	2	100/50	3) CKCK-TV	2	100/53.3
2) CJIC-TV	2	28/15	4) CKCW-TV	2	25/15
5) CKPR-TV	2	100/54.5	32) CJPM-TV	6	61/36.5
6) CKSA-TV	2	116/58	33) CHLT-TV	7	170/100
7) CFRN-TV	3	180.3/90.43	34) CJAY-TV	7	325/180
8) CJBR-TV	3	100/56.9	35) CJLH-TV	7	171/85.5
9) CKOS-TV	3	5/2.5	36) CKRT-TV	7	49/24.5
10) CKVR-TV	3	100/50	37) CFQC-TV	8	180/100
11) CFCM-TV	4	100/50	38) CHAN-TV	8	164/81
12) CFCN-TV	4	55/27.5	39) CKNX-TV	8	90/55
13) CHAB-TV	4	48/25	40) CKSS-TV	8	23/11.5
14) CHSJ-TV	4	100/50	41) CFTO-TV	9	325/162
15) CJCB-TV	4	100/60	42) CHRE-TV	9	140/75
16) CJCN-TV	4	26/13	43) CKBL-TV	9	153/92
17) CKRN-TV	4	115/57.5	44) CKLW-TV	9	178/107
18) CHAU-TV	5	52.5/26.25	45) CFCH-TV	10	28.5/14.25
19) CHOV-TV	5	19.1/9.5	46) CFPL-TV	10	325/195
20) CJCH-TV	5	52.8/26.4	47) CFTM-TV	10	325/162.5
21) CJDC-TV	5	5/2.5	48) CHCH-TV	11	230/143
22) CJFB-TV	5	13.3/6.65	49) CKWS-TV	11	250/150
23) CKBI-TV	5	61/36.5	50) CFCF-TV	12	325/160
24) CKMI-TV	5	13.85/6.78	51) CHEX-TV	12	139/83.4
25) CKSO-TV	5	30/16	52) CKAM-TV	12	141/77
26) CKX-TV	5	100/50	53) CKRS-TV	12	42/21
27) CFCL-TV	6	100/50	54) CFCY-TV	13	38.6/19.3
28) CHAT-TV	6	5.7/3	55) CJOH-TV	13	152/76
29) CKRD-TV	6	13.2/6.6	56) CKCO-TV	13	325/160
30) CHEK-TV	6	100/50	57) CKTM-TV	13	325/162.5
31) CJON-TV	6	62/33			

1) **Calgary TV Ltd**, 955 Rideau Rd, Calgary, Alta. **L.P:** St.Mgr: A. M. Cairns. Dir. Tec: E. J. Crawley. Film Buyer: R. Chase **D.Prgr:** 16.00–08.00 – 2) **Hyland Radio-TV Ltd**, 119 East St, Sault Ste. Marie, Ont – 3) **Trans Canada Communications Ltd**, 1853 Hamilton St, Regina, Sask. **D.Prgr:** 15.00–07.00 – 4) **Moncton Broadc. Ltd**, Knights of Pythias Bldg, Moncton, NB – 5) **Thunder Bay Electronics Ltd**, 87 No. Hill St, Port Arthur, Ont – 6) **CHSA-TV Ltd**, 5036–50th St, Lloydminster, Alta – 7) **Sunwapta Broadc. Co. Ltd**, Broadc. House, Edmonton, Alta. **L.P:** St.Mgr: B.D. Alloway. Dir. Tec: T. E. Wadson. **D.Prgr:** W 14.30(Sat 17.00)–08.00, Sun 18.00–07.30. – 8) **La Radio du Bas St. Laurent Inc**, 13 St. Jean Baptiste, Rimouski, Que – 9) **Yorkton TV Co. Ltd**, 95 East Broadway, Yorkton, Sask. **L.P:** Gen. Mgr. & Film Buyer: G. S. Skinner. **D.Prgr:** Mon–Fri 13.30–08.00, Sat/Sun 19.00–08.00 – 10) **Ralph Snelgrove TV Ltd**, Box 519, Barrie, Ont. **L.P:**

AMERICA'S DAY BEGINS IN GUAM USA

KUAM – Television channels 8-10-12
ABC-NBC-CBS Television Networks

KUAM – Radio 610 kc 1000 watts

KUAM – FM
PACIFIC BROADCASTING CORP.
P. O. Box 368 Agana Guam USA

H. Scott Killgore — **President**
S. N. Rubin — **Treasurer**
William Nielsen — **Vice Pres. & Gen. Mgr.**

New York Office
211 East 43rd St.
New York, N. Y.
Tel: MU 7-8436

San Francisco Office
100 California St.
San Francisco, Calif.
Tel: YU 2-9933

The eyes and ears of the Marianas Islands

St.Mgr: H. J. Snelgrove. Film Buyer: J. Mattenley, **D.Prgr:** 14.00–06.00 – 11) **Télévision du Quebec (Canada) Ltée,** 1000 Myrand Ave, Quebec 10, Que. **L.P:** Gen. Mgr: J. A. Pouliot. Film Buyer: G. Lovett. **D.Prgr:** ch4 16.00–05.45 (French), ch5 14.30–04.10 (English) (see 24) – 12) **CFCN-TV Ltd,** Broadc. House, Calgary, Alta. **L.P:** Pres: H. G. Love. Dir. Tec: R. W. Lamb. Film Buyer: E. W. Chapmann. **D.Prgr:** 15.00–08.00 – 13) **CHAB Ltd,** Johnston Bldg, Moose Jaw, Sask. **D.Prgr:** 17.00–06.00 – 14) **New Brunswick Broadc. Co. Ltd,** 14 Church St, Saint Johns, N. B. – 15) **Cape Breton Broadc. Ltd,** 318 Charlotte St, Sydney, N. S. **D.Prgr:** 16.00–04.00 16) **Newfoundland Broadc. Co. Ltd,** C. P. 100, Carleton sur Mer, Que. **L.P:** St. Mgr: Ch. H. Houde. Dir. Tec: M. Chabot. **D.Prgr:** 15.30–06.30. 17) **R. Nord Inc,** 70 rue Gamble, Rouyn, Que – 18) **Télévision de la Baie des Chaleurs Inc,** Carleton, Que. **L.P:** St. Mgr. & Film Buyer: Dr. Ch. Houde. Dir. Tec: M. Chabot. **D.Prgr:** 15.00–07.00 – 19) **Ottawa Valley TV Co. Ltd,** 319 Pembroke St, East, Pembroke, Ont. **L.P:** Pres: E. G. Archibald. Film Buyer: B. Duval. **D.Prgr:** 15.00–05.40.
20) **CJCH Ltd,** 2885 Robbie St, Halifax, N. S. **D.Prgr:** Mon–Fri 14.30–05.00, Sat 15.00–06.00, Sun 17.00–04.30 – 21) **R. St. CJDC,** Dawson Creek, B. C – 22) **Swift Current Telecasting Co. Ltd,** Swift Current, Sask – 23) **Central Broadc. Co. Ltd,** 10th St, Prince Albert, Sask – 24) see 11) – 25) **Cambian Broadc. Ltd,** 336 Ash St, Sudbury, Ont. **D.Prgr:** 13.00–07.00 – 26) **Western Manitoba Broadcasters Ltd,** 2940 Victoria Ave, Beandon, Man – 27) **CFCL-TV,** P.O. Box 620, Timmins, Ont. **L.P:** St. Mgr: R. Barette – 28) **Monarch Broadc. Co. Ltd,** Box 760, Medicine Hat, Alta. **L.P:** St. Mgr: F. G. Gunter. Dir. Tec: S. Gaffney. **D.Prgr:** 17.00–08.30 – 29) **CHCA-TV Ltd,** Box 668, Red Deer, Alta. **L.P:** St. Mgr: W. Wilks. Dir. Tec: J. Colter. **D.Prgr:** 15.30–07.30 – 30) **CHEK TV Ltd,** 3693 Epsom Dr, Victoria, B. C – 31) see 16) – 32) **CJPM-TV Inc,** P.O. Box 600, Chicoutimi, Que. **L.P:** Dir: P. J. Audette. Dir. Tec: R. Hudon. Film Buyer: C. Blain. **D.Prgr:** 17.00–05.00. Color tr's from Oct 1966. – 33) **La Tribune Inc,** 221, rue Dufferin, Sherbroke, Que – 34) **Ch. 7 TV Ltd,** Polo Park, Winnipeg, Man – 35) **Lethbridge TV Ltd,** P.O. Box 1120, Lethbridge, Alta. **L.P:** Gen. Mgr: N. Botterill. **D.Prgr:** 17.00–07.30 (approx.) – 36) **CKRT-TV Ltd,** 1 Christophe Colomb, Rivière du Loup, Que – 37) **CFQC TV Ltd,** 216 First Ave North, Saskatoon, Sask. **D.Prgr:** 15.00–08.00 – 38) **British Columbia TV Broadc. System Ltd,** Burnaby, B. C – 39) **R. St. CKNX Ltd,** Cnr. Carling Terrace, Wingham, Ont. **D.Prgr:** 17.00–06.30 – 40) **Yorkton TV Co. Ltd,** 95 East Broadway, Yorkton Sask – 41) **Baton Broadc. Ltd,** P.O. Box 9, Toronto 16, Ont. **L.P:** Gen. Mgr: W. O. Crampton. Dir. Tec: H. Berger. Film Buyer: J. Falkes. **D.Prgr:** 13.00–05.30. Color tests from July 66. Full color broadc. from Oct 1st 1966. – 43) **CHAB Ltd,** Johnstone Bldg, Moose Jaw, Sask – 44) **La Compagnie de Radiodiff. de Matane Ltd,** Matane, Que – 45) **Western Ontario Broadc. Co. Ltd,** 825 Riverside Dr. West, Windsor, Ont – 46) **Tel-Ad Co. Ltd,** Callander, Ont – 47) **London Free Press Printing Co. Ltd,** 442–446 Richmond St, London, Ont – **L.P:** St. Mgr: R. A. Reinhart. **D.Prgr:** 15.00–05.00(Sat 14.00–06.00. Sun 13.30–06.00) – 48) **Télé-Metropole Corp,** 1405 Maisonneuve St, Montreal. **L.P:** St. Mgr: R. Giguere. Dir. Tec: M. Doucet. Film Buyer: M. Bastien. **D.Prgr:** 13.00–06.30. **F.Pl:** Color tr's – 49) **Niagara TV Ltd,** 163 Jackson St, Hamilton, Ont. **L.P:** Dir. Gen: K. D. Soble. **D.Prgr:** 12.00–05.00 – 50) **Frontenac Broadc. Co. Ltd,** 170 Queen Str, Kingston, Ont. **L.P:** Gen. Mgr: R. Hofstetter. Film Buyer: D. Lawrie. **D.Prgr:** 14.00–06.30 – 51) **Canadian Marconi Co,** 405 Ogilvy Ave, Montreal 15. **D.Prgr:** 14.30–06.00 – 52) **Kawartha Broadc. Co. Ltd,** P.O. Box 659, Peterborough, Ont. **L.P:** St. Mgr: G. Schele. **D.Prgr:** 15.00–06.00 – 53) **Moncton Broadc. Ltd,** Moncton, N. B – 54) **R. Saguenay Ltd,** 179 Sir Wilfrid Laurier, Jonquiere, Que – 55) **The Island R. Broadc. Co. Ltd,** 85 Kent St, Charlottetown, PEI. **L.P:** St. Mgr: R. F. Large. **D.Prgr:** 18.00–04.15 – 56) **Bushnell TV Co. Ltd,** TV House, Ottawa 5. **L.P:** St. Mgr: S. W. Griffiths. Film Buyer: P. Francis. **D.Prgr:** 11.30–05.30 – 57) **Central Ontario TV Ltd,** 864 King St, Kitchener, Ont. **L.P:** St. Mgr: W. D. McGregor. Dir. Tec: J. Smith. Film Buyer: B. Lawson. **D.Prgr:** W 13.20(Sat 14.30)–06.00, Sun 14.00–05.10. Color tr's from Oct. 1st 1966 – 58) **TV St. Maurice, Inc,** P.O. Box 277, Trois Rivieres, Que. **L.P:** Gen. Mgr: H. Audet. Film Buyer: A. Aubicon. Dir. Tec: R. Bonneau, **D. Prgr:** 14.30–06.00.

ST. PIERRE ET MIQUELON (French)

ORTF: Station (System K, 625 lines): 175.25/181.75Mc 0.05kW H – planned for February 1967.

UNITED STATES OF AMERICA

ALABAMA

WAPI-TV (Ch 13), Box 1310, Birmingham 35201, Donald D. Wear V. P. & Gen. Mgr.
WBMG-TV (Ch 42), P.O. Box 6146, Birmingham 35209, Hugh M. Smith, Gen. Mgr.
WBRC-TV (Ch 6), Box 389, Birmingham 35201, R. T. Schlinkert, V. P. & Gen. Mgr.
*WCIQ (Ch 7), 2101 Magnolia Av., Birmingham 35205, Raymond Hurlbert, Gen. Mgr.
WMSL-TV (Ch 23), Mutual Savings Life Bldg, Decatur 35601, Frank Whisenant, Pres. & Gen. Mgr.
WTVY-TV (Ch 4), Box 1089, Dothan 36302, F. E. Busby, Pres. & Gen. Mgr.
WOWL-TV (Ch 15), Box 2220, Florence 35632, Richard B. Biddle, Pres.
WAAY-TV (Ch 31), 1000 Monte Sano Blvd, S. E, Huntsville 34801, Maury Farrell, Gen. Mgr.
WHNT-TV (Ch 19), 960 Monte Sano Blvd, Huntsville 34801, Charles F. Grisham, Pres. & Gen. Mgr.
WALA-TV (Ch 10), 210 Government St, Mobile 36602, H. Ray McGuire, Exec. V. P. & Gen. Mgr.
WKRG-TV (Ch 5), Box 1184, Mobile 36601, C. P. Persons, Jr., Exec. V. P. & Gen. Mgr.
WCOV-TV (Ch 20), Adrian Lane, Montgomery 36111, Henry Amerson, V. P. & Gen. Mgr.
WSFA-TV (Ch 12), 10 East Delano St, Montgomery 36105, Robert Villar, Gen. Mgr.
WKAB-TV (Ch 32), 3251 Harrison Rd, Montgomery 36109, Robert L. Tuttle, St. Mgr.
WSLA-TV (Ch 8), Box 1016, Selma 36702, James M. Cothren, Gen. Mgr.
WCFT-TV (Ch 33), Box 2427, Tuscaloosa 35402, Arden D. Moser, Gen. Mgr.

ALASKA

KENI-TV (Ch 2), 4th Ave. Theatre Bldg, Anchorage 99501, Alvin O. Bramstedt, Pres. & Gen. Mgr.
KTVA (Ch 11), Box 2200, Anchorage 99501, A. G. Hiebert, Pres. & Gen. Mgr.
KFAR-TV (Ch 2), P.O. Box 910, Fairbanks 99701, Don Andon, St. Mgr.
KTVF (Ch 11), 3rd & Lacey Sts, Fairbanks 99701, John Griffin, St. Mgr.

ARIZONA

KOOL-TV (Ch 10), 511 West Adams St, Phoenix 85003, Homer Lane, V. P. & Gen. Mgr.
KPHO-TV (Ch 5), 631 N. First Ave, Phoenix 85004, Richard B. Rawls, V. P. & Gen. Mgr.
KTAR-TV (Ch 12), 1101 N. Central Ave, Phoenix 85004, Richard Lewis, Pres. & Gen. Mgr.
KTVK-TV (Ch 3), 3435 N. 16th St, Phoenix 85016, E. W. McFarland, Pres.
*KAET (Ch 8), Arizona State University, Tempe 85281, Robert H. Ellis, Dir. of Broadcasting.
KGUN-TV (Ch 9), 2175 N. Sixth Ave, Tucson 85705, Fred Vance, V. P. & Gen. Mgr.
KOLD-TV (Ch 13), 115 W. Drachman St, Tucson 85705, Paul Plunkett, V. P. & Gen. Mgr.
KVOA-TV (Ch 4), 209 W. Elm St, Tucson 85705, Gordon Hamilton, St. Mgr.
*KUAT (Ch 6), Herring Hall, University of Arizona, Tucson 85721, Frank Barreca, Mgr.
KBLU-TV (Ch 13), 1322 Fourth Ave, Yuma 85364, Robert Crites, Pres. & Gen. Mgr.
KIVA (Ch 11), P.O. Box 1671, Yuma 85364, Leavenworth Wheeler, Gen. Mgr.

ARKANSAS

KTVE (Ch 10), P.O. Box 791, El Dorado 71731, James T. Hite, St. Mgr.
KFSA-TV (Ch 5), 101 N. Fourth St, Ft. Smith 72901, J. W. Slates, V. P. & Gen. Mgr.
KAIT-TV (Ch 8), Box 790, Jonesboro 72402, W. F. deTournillon, Gen. Mgr.
KARK-TV (Ch 4), 1001 Spring St, Little Rock 72202, Robert L. Brown, V. P. & Gen. Mgr.
KATV (Ch 7), 310 W. Third St, Little Rock 72202, Robert Doubleday, V. P. & Gen. Mgr.
KTHV (Ch 11), Box 269, Little Rock 72203, B. G. Robertson, V. P. & Gen. Mgr.

CALIFORNIA

KERO-TV (Ch 23), 321-21st St, Bakersfield 93305, Kenneth R. Croes, V. P. & Gen. Mgr.
KBAK-TV (Ch 29), 2110 Chester Ave, Bakersfield 93304, Burt I. Harris, Pres.
KLYD-TV (Ch 17), 2831 Eye St, Bakersfield 93301, Dave Maxwell, V. P. & Gen. Mgr.
KNBC (Ch 4), 3000 W. Alameda, Burbank 91505, Robert Howard, V. P. & Gen. Mgr.
KHSL-TV (Ch 12), Box 1041, Chico 95927, Mrs. Hugh McClung, Pres. & Gen. Mgr.
*KIXE (Ch 9), Chico State College, Chico 95926, J. Allen Larner, Dir. of School Services.
KCFT-TV (Ch 42), 74 A. St, Concord 94520, Jerry Bassett, Pres.
KIEM-TV (Ch 3), Box 1021, Eureka 95502, Paul Hoff, V. P. & Gen. Mgr.

KVIQ-TV (Ch 12), Box 1019, Eureka 95502, Sam Horel, Gen. Mgr.
KAIL-TV (Ch 53), Box 5160, Fresno 93744, B. L. Golden, Pres.
KFRE-TV (Ch 30), 733 L St, Fresno 93701, James H. Burgess, Mng. Dir.
KICU-TV (Ch 45), 2803 Divisadero St, Fresno 93721, Donald W. Webster, St. Mgr.
KJEO-TV (Ch 47), Box 1708, Fresno 93717, George C. Fleharty, Pres. & Gen. Mgr.
KMJ-TV (Ch 24), 1544 Van Ness, Fresno 93721, John I. Edwards, St. Mgr.
KABC-TV (Ch 7), Prospect & Talmadge Sts, Hollywood 90027, Elton H. Rule, V. P. & Gen. Mgr.
KCOP (Ch 13), 915 N. LaBrea Ave, Hollywood 90038, John Hopkins, Pres.
KHJ-TV (Ch 9), 5515 Melrose Ave, Los Angeles 90028, Malcolm C. Klein, Gen. Mgr.
KMEX-TV (Ch 34), 721 N. Bronson Ave, Hollywood 90038, Julian Kaufman, V. P.
KNXT (Ch 2), 6121 Sunset Blvd, Los Angeles 90028, Robert D. Wood, V. P. & Gen. Mgr.
KTTV (Ch 1), 5746 Sunset Blvd, Los Angeles 90028, Charles D. Young, V. P. & Gen. Mgr.
KPOL-TV (Ch 22), 5700 Sunset Blvd, Los Angeles 90028, Fredrick D. Custer, Gen. Mgr.
KTLA (Ch 5), 5800 Sunset Blvd, Hollywood 90028, Carlo Anneke, Gen. Mgr.
*KCET (Ch 28), 1313 No. Vine St, Hollywood 90028, James Robertson, V. P. & Gen. Mgr.
KTVU (Ch 2), 1 Jack London Square, Oakland 94607, Frank G. King, V. P. & Gen. Mgr.
KRCR-TV (Ch 7), 2770 Pioneer Dr, Redding 96001, Richard Green, Gen. Mgr.
KCRA-TV (Ch 3), 310 Tenth St, Sacramento 95814, Jon S. Kelly, Gen. Mgr.
KXTV (Ch 10), 601 Seventh Ave, Sacramento 95818, Robert Wilson, V. P. & Gen. Mgr.
KSBW-TV (Ch 8), Box 1651, Salinas 93903, John C. Cohan, Pres. & Gen. Mgr.
*KVCR (Ch 24), 701 S. Mt. Vernon Av, San Bernardino 92403, Robert F. Fuzy, Gen. Mgr.
KAAR-TV (Ch 39), 8330 Engineer Rd, San Diego 92111, Lawrence Shushan, Gen. Mgr.
KFMB-TV (Ch 8), Fifth & Ash Sts, San Diego 92101, George Whitney, V. P. & Gen. Mgr.
KOGO-TV (Ch 10), Box 628, San Diego 92112, Clayton H. Brace, V. P. & Gen. Mgr.
KGO-TV (Ch 7), 277 Golden Gate Ave, San Francisco 94102, David M. Sacks, V. P. & Gen. Mgr.
KPIX (Ch 5), 2655 Van Ness, San Francisco 94109, Louis S. Simon, Gen. Mgr.
KRON-TV (Ch 4), 929 Mission St, San Francisco 94103, A. H. Constant, V. P. & Gen. Mgr.
*KVIE (Ch 6), P.O. Box 6, Sacramento 95801, John C. Crabbe, Gen. Mgr.
*KQED (Ch 9), 525 Fourth St, San Francisco 94107, James Day, V. P. & Gen. Mgr.
KNTV (Ch 11), 645 Park Ave, San Jose 95110, Fran Conrad, St. Mgr.
*KTEH (Ch 54), 70 W. Hedding St, San Jose 95110, Warren L. Wade, St. Mgr.
KEYT (Ch 3), 730 Miramonte Dr, Santa Barbara 93105, Leslie H. Norrins, V. P. & Gen. Mgr.
*KCSM (Ch 14), 1700 Hillsdale Blvd, San Mateo 94402, Jacob H. Wiens, Gen. Mgr.
KCOY-TV (Ch 12), Box 166, Santa Maria 93456, James H. Ranger, Gen. Mgr.
KOVR (Ch 13), 225 E. Miner Ave, Stockton 95202, Ramsey Elliott, Gen. Mgr.

COLORADO

KKTV (Ch 11), 2110, Colorado Springs 90901, Rush Evans, Exec. V. P. & Gen. Mgr.
KRDO-TV (Ch 13), 399 S. Eighth St, Colorado Springs 80905, Harry W. Hoth Jr, Pres. & Gen. Mgr.
KBTV (Ch 9), 1089 Bannock St, Denver 80204, Alvin Flanagan, Exec. V. P. & Gen. Mgr.
KLZ-TV (Ch 7), 131 Spear St, Denver 80204, Hugh B. Terry, Pres. & Gen. Mgr.
KOA-TV (Ch 4), 1044 Lincoln St, Denver 80203, Ralph Radetsky, Pres. & Gen. Mgr.
KWGN-TV (Ch 2), 550 Lincoln St, Denver 80203, Richard E. Jungers, V. P. & Gen. Mgr.
*KRMA (Ch 6), 1250 Welton St, Denver 80204, Russell Casement, Exec. Dir.
KREX-TV (Ch 5), Box 789, Grand Junction 81502, Rex Howell, Pres. & Gen. Mgr.
KOAA-TV (Ch 5), 2226 TV Lane, Pueblo 81003, James Croll, St. Mgr.

CONNECTICUT

WHCT (Ch 18), 555 Asylum St, Hartford, Keigler E. Flake, Gen. Mgr.
WTIC-TV (Ch 3), 3 Constitution Plaza, Hartford 06103, Leonard J. Patricelli, V. P. & Gen. Mgr.
*WEDH (Ch 24), 266 Pearl St, Hartford 06103, Ben A. Hudelson, Gen. Mgr.
WNHC-TV (Ch 8), 135 College St, New Haven 06510, Howard Maschmeier, Gen. Mgr.
WATR-TV (Ch 20), 440 Meadow St, Waterbury 06702, Harold Thomas, Pres.
WHNB-TV (Ch 30), 1422 New Britain Ave, West Hartford 06110, Robert W. Bray, V. P. & Gen. Mgr.

DELAWARE

*WHYY (Ch 12), 4548 Market S.T., Philadelphia 19139, Warren A. Kraetzer, Exec. V. P.

WASHINGTON, D.C.

WDCA-TV (Ch 20), 5202 River Rd, Washington 20016, Milton Grant, Pres. & Gen. Mgr.
WMAL-TV (Ch 7), 4451 Connecticut Ave, N.W, Washington 20008, Frederick Houwink, V. P. & Gen. Mgr.
WOOK-TV (Ch 14), 5321 First Place, N.E, Washington 20011, E. Carlton Myers Jr, Gen. Mgr.
WRC-TV (Ch 4), 4001 Nebraska Ave, N.W, Washington 20016, Joseph Goodfellow, V. P. & Gen. Mgr.
WTTG (Ch 5) 5151 Wisconsin Ave, N.W, Washington 20016, Robert M. Bennett, V. P. & Gen. Mgr.
WTOP-TV (Ch 9), 40th & Brandywine Sts, N.W, Georg Hartford, V. P. & Gen. Mgr.
*WETA (Ch 26), 2600 Fourth St, N.W, Washington 20001, William J. McCarter, Gen. Mgr.

FLORIDA

WINK-TV (Ch 11), 2824 Palm Beach Blvd, Fort Myers 33901, A. J. Bauer, V. P. & Gen. Mgr.
WESH-TV (Ch 2), P.O. Box 1551, Daytona Beach 32015, Thomas S. Gilchrist Jr, V. P. & Gen. Mgr.
WTVX (Ch 34), N. Federal Highway, Fort Pierce 33450, W. E. Minshall, Pres. & Gen. Mgr.
*WUFT (Ch 5), 234 Stadium Bldg, Gainesville 32603, Dr. Kenneth A. Christiansen, Dir. of TV.
WFGA-TV (Ch 12), 1070 E. Adams St, Jacksonville 32202, Jessie H. Cripe, V. P. & Gen. Mgr.
WJKS-TV (Ch 17), Box 17000, Jacksonville 32216, Fred P. Shawn, V. P. & Gen. Mgr.
WJXT (Ch 4), 1851 Southampton Rd, Jacksonville 32207, Glenn Marshall Pres. & Gen. Mgr.
*WJCT (Ch 7), 2037 Main St, Jacksonville 32206, Fred Rebman, Gen. Mgr.
WCKT (Ch 7), 1401 79th St, Causeway Miami, 33141, Charles Kelly, V. P. & Gen. Mgr.
WLBW-TV (Ch 10), 2133 N.W. 11th Ave, Miami 33125, Thomas Welstead, V. P. & Gen. Mgr.
WTVJ (Ch 4), 316 N. Miami Ave, Miami 33128, William Brazzil, V.P. in chg.
*WTHS (Ch 2), 1410 N.E. 2nd Ave, Miami 33132, John P. McIntyre, Dir. of Learning Resource.
*WSEC (Ch 17), 1410 N.E. 2nd Av, Miami 33132, John P. McIntyre, Dir. of Learning Resource.
WDBO-TV (Ch 6), Box 1833, Orlando 32802, Arnold F. Schoen Jr, V. P.
WFTV (Ch 9), Box 5795, Orlando 32805, Joseph L. Brechner, Pres. & Gen. Mgr.
*WMFE (Ch 24), 2908 West Oak Ridge Rd, Orlando, A. F. Edmunds, Dir. & Gen. Mgr.
WPTV (Ch 5), 5 Cocoanut Row, Palm Beach 33480, Chester E. Pike Jr, V. P. & Gen. Mgr
WJHG-TV (Ch 7), 107 Harrison Ave, Panama City 32401, James Tighe, St. Mgr.
WSUN-TV (Ch 38), Municipal Pier, St. Petersburg 33701, Earl W. Welde, Gen. Mgr.
WLCY-TV (Ch 10), 2429 Central Ave, St. Petersburg 33713, Sam Rahall, Pres. & Gen. Mgr.
WCTV (Ch 6), Box 3547, Tallahassee 32303, Joseph F. Hosford, Gen. Mgr.
*WFSU (Ch 11), 202 Dodd Hall, Florida State University, Tallahassee 32306, Edward L. Herp, Dir. of University Broadcasting Services.
WFLA-TV (Ch 8), Box 1410, Tampa 33601, George W. Harvey, V. P. & Gen. Mgr.
WTVT (Ch 13), Box 1198, Tampa 33601, E. B. Dodson, V. P. & Gen. Mgr.
*WEDU (Ch 3), 908 South 20th St, Tampa 33605, R. LeRoy Lastinger, Gen. Mgr.
WEAT-TV (Ch 12), Box 70, West Palm Beach 33402, John D. MacArthur, Pres. & Gen. Mgr.

GEORGIA

WALB-TV (Ch 10), Stuart Ave, Albany 31705, Raymond E. Carow, Gen. Mgr.
WAGA-TV (Ch 5), P.O. Box 4207, Atlanta 30302, H. W. Ray, Gen. Mgr.
*WXGA (Ch 8), 2293 State Office Bldg, Atlanta 30303, Lee E. Franks, Exec. Dir. Education Television Services.
WAII-TV (Ch 11), 1611 W. Peachtree St, N.E, Atlanta 30309, Joseph Higgins, V. P. & Gen. Mgr.
WSB-TV (Ch 2), 1601 W. Peachtree St, N.E, Atlanta 30309, Don Elliot Heald, Gen. Mgr.
*WETV (Ch 30), 740 Bismark Rd, N.E, Atlanta 30324, Dr. Gilbert Tauffner, Exec. Dir. of Radio & TV Education.
*WGTV (Ch 8), Center for Continuing Education, University of Georgia 30601, Dr. William H. Hale Jr, Assoc. Dir.
WJBF (Ch 6), P.O. Box 1404, Augusta 30903, Asa Stallworth, V. P. & Gen. Mgr.
WRBL-TV (Ch 3), Box 270, Columbus 31902, J. W. Woodruff Jr, Pres. & Gen. Mgr.
WTVM (Ch 9), Box 1848, Columbus 31902, Joe Windsor, V. P. & Gen. Mgr.
*WJSP (Ch 28), Columbus.
WMAZ-TV (Ch 13), Bankers Insurance Bldg, Macon 31201, Frank Crowther, Gen. Mgr.
WSAV-TV (Ch 3), Box 2429, Savannah 31403, Harben Daniel, Pres. & Gen. Mgr.
WTOC-TV (Ch 11), Box 858, Savannah 31402, Ben Williams, Exec. V. P.
*WVAN (Ch 9), Savannah.

HAWAII

KGMB-TV (Ch 9), Box 581, Honolulu 96809, Cecil Heftel, Pres. & Gen. Mgr.
KHON-TV (Ch 2), 1170 Auahi St, Honolulu 96814, Daniel Kawakami, Gen. Mgr.
KHVH-TV (Ch 4), 1290 Ala Moana Blvd, Honolulu 96814, Lawrence S. Berger, Pres. & Gen. Mgr.
KTRG-TV (Ch 13), 2227-A Kalahaua Ave, Honolulu 96815, David Watumull, Pres. & Gen. Mgr.
*KHET (Ch 11), 1776 University Av, Honolulu 98622, Robert M. Reed, Dir of ETV Broadcasting.

IDAHO

KBOI-TV (Ch 2), 1007 W. Jefferson St, Boise 83702, Westerman Whillock, Gen. Mgr.
KTVB (Ch 7), 700 Crestline Dr, Boise 83702, Robert Krueger, Exec. V. P. & Gen. Mgr.
KIFI-TV (Ch 8), Box 2148, Idaho Falls 83401, J. M. Brady, Pres. & Gen. Mgr.
KID-TV (Ch 3), 1255 E. 17th St, Idaho Falls 83401, J. Allen Jensen, Exec. V. P. & Gen. Mgr.
*KUID (Ch 12), University of Idaho, Moscow 83843, Gordon Law, St. Mgr.
KMVT (Ch 11), Elizabeth at Eastland, Twin Falls 83301, Gordon Glasmann, Pres. & Gen. Mgr.

ILLINOIS

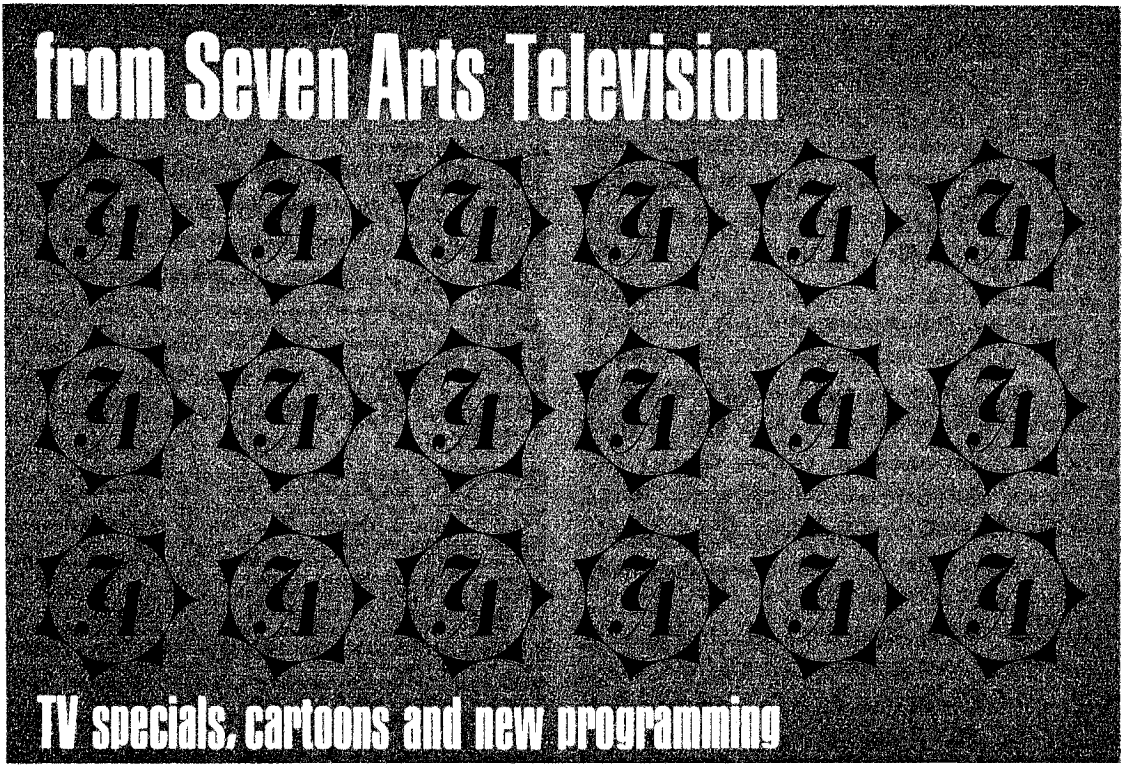
*WSIU (Ch 8), Southern Illinois University, Carbondale 62901, Buren C. Robbins, Gen. Mgr.
WCIA (Ch 3), 509 S. Neil St, Champaign 61820, August C. Meyer, Pres.
WCHU (Ch 33), 17 E. University Ave, Champaign 61820, James T. Kelly, St. Mgr.
WFLD-TV (Ch 32), Television Center, Chicago, 60611 Sterling C. Quinlan, Pres. & Gen. Mgr.
WBBM-TV (Ch 2), 630 N. McClurg Ct, Chicago 60611, Edward Kenefick, V. P. & Gen. Mgr.
WBKB (Ch 7), 190 N. State St, Chicago 60601, Richard A. O'Leary, V. P. & Gen. Mgr.
WCIU (Ch 26), 141 W. Jackson, Chicago 60604, J. W. O'Connor, Gen. Mgr.
WGN-TV (Ch 9), 2501 Bradley Place, Chicago 60618, B. H. Berentson, V. P. & Gen. Mgr.
WMAQ-TV (Ch 5), Merchandise Mart Plaza, Chicago 60654, Robert Lemon, V. P. & Gen. Mgr.
*WTTV (Ch 11), 5400 N. St. Louis Av, Chicago 60625, Dr. John W. Taylor, Exec. Dir.
*WXXW (Ch 20), 5400 N. St. Louis Av, Chicago 60625, Dr. John W. Taylor, Exec. Dir.
WAND (Ch 17), Box 631, Decatur 62521, Len Carl, V. P. & Gen. Mgr.
WEEK-TV (Ch 43), 2907 Springfield Rd, East Peoria 61611, Fred C. Mueller, Pres. & Gen. Mgr.
WSIL-TV (Ch 3), 21 W. Poplar St, Harrisburg 62946, O. L. Turner, Gen. Mgr.
WQAD-TV (Ch 8), 300 Park 16th St, Moline 61265, Arthur M. Swift, Exec. V. P. & Gen. Mgr.
WIRL-TV (Ch 19), 109 S. W. Jefferson, Peoria 61602, Howard H. Frederick, Gen. Mgr.
WMBD-TV (Ch 31), 212 S. W. Jefferson Ave, Peoria 61602, William L. Brown, Gen. Mgr.
WGEM-TV (Ch 10), Hotel Quincy, Quincy 62301, Joseph Bonansinga, V. P. & Gen. Mgr.
KHQA-TV (Ch 7), 510 Main St, Quincy 62301, Walter J. Rothschild, Pres.
WCEE-TV (Ch 23), Box 957, Rockford 61105, Earl Hickerson, Gen. Mgr.
WHBF-TV (Ch 4), Telco Bldg, Rock Island 61201, Leslie C. Johnson, V. P. & Gen. Mgr.
WTVO-TV (Ch 39), Box 470, Rockford 61105, Harold Froelich, Gen. Mgr.
WREX-TV (Ch 13), W. Auburn & Winnebago Rds, Rockford 61103, J. M. Baisch, V. P. & Gen. Mgr.
WICS-TV (Ch 20), 2680 E. Cook, Springfield 62703, Milton D. Friedland, V. P. & Gen. Mgr.
*WILL (Ch 12), 227 Gregory Hall, Urbana 61801, Frank E. Schooley, Dir. of Broadcasting.

INDIANA

WEHT-TV (Ch 50), Box 395, Evansville 47704, William R. Hight, V. P. & Gen. Mgr.
WFIE (Ch 14), 1115 Mt. Auburn Rd, Evansville 47712, Jack E. Douglas, V. P. & Gen. Mgr.
WTVW (Ch 7), 405 Carpenter St, Evansville 47708, E. Berry Smith, Gen. Mgr.
WPTA (Ch 21), 333 Butler Rd, Ft. Wayne 46803, Victor H. Sterling, Gen. Mgr.
WANE-TV (Ch 15), 2915 W. State Blvd, Ft. Wayne 46807, Reid G. Chapman, V. P. & Gen. Mgr.
WKJG-TV (Ch 23), 2633 W. State Blvd, Ft. Wayne 46808, Hilliard Gates, V. P. & Gen. Mgr.
WFBM-TV (Ch 6), 1330 N. Meridian St, Indianapolis 46202, Eldon Campbell, V. P. & Gen. Mgr.
WISH-TV (Ch 8), Box 1950, Indianapolis 46206, Robert B. McConnell, V. P. & Gen. Mgr.
WTTV-TV (Ch 4), 3490 Bluff Road, Indianapolis 46217, Robert G. Holben, Gen. Mgr.
WLW-I (Ch 13), 1401 N. Meridian St, Indianapolis 46202, John M. Slocum, Gen. Mgr.
WFAM-TV (Ch 18), McCarty Lane, Lafayette 47905, Richard W. Long, Gen. Mgr.
WTAF-TV (Ch 31), P.O. Box 631, Marion 46952, Gene G. Cook, Gen. Mgr.
WLBC-TV (Ch 49), Box 271, Muncie 47302, W. F. Craig, V. P.
WNDU-TV (Ch 16), P.O. Box 16, South Bend 46624, William T. Hamilton, V. P. & Gen. Mgr.
WSBT-TV (Ch 22), 300 W. Jefferson Blvd, South Bend 46601, Warren Wheeler, Gen. Mgr.
WSJV-TV (Ch 28), Box 28, South Bend 46624, Don E. Fuller, Gen. Mgr.
WTHI-TV (Ch 10), 918 Ohio St, Terre Haute 47801, Anton Hulman Jr, Pres. & Gen. Mgr.
WTWO (Ch 2), Box 299, Terre Haute 47808, John T. Gelder Jr, Exec. V. P.

IOWA

WOI-TV (Ch 5), WOI-TV Bldg, Ames 50010, Robert C. Mulhall, Gen. Mgr.
KCRG-TV (Ch 9), First Ave. & First St, S.W, Cedar Rapids, 52404, Edwin J. Lasko, Gen. Mgr.
WMT-TV (Ch 2), P.O. Box 1111, Cedar Rapids 52406, W.B. Quarton, Pres.
WOC-TV (Ch 6), 805 Brady St, Davenport 52803, David Palmer, Pres.
KRNT-TV (Ch 8), Ninth & Pleasant Sts, Des Moines 50309, Robert Dillon, V. P. & Gen. Mgr.
WHO-TV (Ch 13), 1100 Walnut St, Des Moines 50309, Robert H. Harter, Gen. Mgr.
*KDPS (Ch 11), 1800 Grand Av, Des Moines 50307, John A. Montgomery, Mgr.
KQTV (Ch 21), Television Square, Fort Dodge 50501, Ed Breen, Pres. & Gen. Mgr.
KGLO-TV (Ch 3), Second & Pennsylvania, Mason City 50401, Lloyd Loers, St. Mgr.
KTVO-TV (Ch 3), KTVO Bldg, Ottumwa 52501, Dale Cowle, Gen. Mgr.
KTIV (Ch 4), Tenth & Grandview, Sioux City 51103, Dietrich Dirks, Pres. & Gen. Mgr.
KVTV (Ch 9), Seventh & Douglas Sts, Sioux City 51101, William F. Turner, Gen. Mgr.
KWWL-TV (Ch 7), E. Fourth & Franklin, Waterloo 50703, Thomas L. Young, Exec. V. P.



an outstanding offering of quality entertainment for world-wide television broadcasting:

MARINE BOY: There's dramatic action, magic and excitement beneath the seas in this daring new series of 26 half-hour animated underwater color adventures.

NIGHT TRAIN: An exciting commercial showcase of 26 new one-hour variety programs that blend today's top rhythm and blues talent with the established stars of the recording world.

THE NUTCRACKER: A new one-hour Color TV Special produced by Bavaria Studios with music by the Philharmonic Orchestra of Budapest arranged by Franz Allers ("My Fair Lady") and featuring internationally acclaimed premiere dancers from the New York City Ballet, the National Opera of Stuttgart, the National Opera of Munich and the Royal Opera of Copenhagen. Colorcast as a Christmas TV Special on the CBS Television Network.

MAN IN SPACE: An exciting and timely series of six one-hour TV Specials (5 in color) of the incredible story of man in space, his trip to the moon and its consequences.

THE GYPSY ROSE LEE SHOW: New half-hour daily across-the-board interview program starring Gypsy Rose Lee and various famous guest celebrities including Judy Garland, Robert Goulet, Lee Remick, Arthur Fiedler and Diahann Carroll.

THE DISCOPHONIC SCENE: Jerry Blavat, the upcoming international teenage music idol hosts this variety show series. Superbly produced with a cast of 100 teenagers, it's 60-minutes a go-go with today's biggest teen music stars in the guest spotlight.

BEHIND THE SCENES WITH THE ROYAL BALLET: A beautiful new half-hour TV Special backstage with Rudolf Nureyev and Dame Margot Fonteyn.

26 BOSTON SYMPHONY CONCERTS: One-hour TV Concert Specials featuring the world renowned 104-piece Boston Symphony Orchestra and famous guest soloists. The concerts are conducted by Erich Leinsdorf, Charles Munch, Aaron Copland, William Steinberg and Richard Burgin.

OH, MY WORD: Famous guest celebrities such as Bob Crosby, Eartha Kitt, Pat Boone and Phyllis Diller try to determine which of four panelists is giving the correct definition to various wild and wacky words. One panel member knows the real definition, the others invent one. 26 very funny half-hours.

100 "OUT OF THE INKWELL" CARTOONS IN COLOR: New TV subjects produced by Max Fleischer, the creator of Popeye.

AVAILABLE IN CANADA ONLY

234 (ORIGINAL) POPEYE CARTOONS: Rated the very best TV cartoons. 114 available in color.

337 WARNER BROS. CARTOONS: Bugs Bunny, Porky Pig and all the other famous Warner Bros. characters. 311 in color.

191 LOONEY TUNES CARTOONS: Starring Porky Pig, Daffy Duck and their friends.

Seven Arts Television

Inquiries may be directed to:
Roger Carlin, Dir. of Far Eastern & European Sales
Vicente Ramos, Dir. of Latin American Sales

New York: 200 Park Avenue • YUkon 6-1717
Los Angeles: 9000 Sunset Boulevard CRestview 8-1771
Toronto: 11 Adelaide St. West • EMpire 4-7193

Seven Arts Productions International, Limited
Roberts Bldg., East Street, Nassau, Bahamas
Cable: SEVINT

KANSAS
KTVC (Ch 6), Box 157, Dodge City 67801, Wendell Elliott, V. P. & Gen. Mgr.
KOAM-TV (Ch 7), Box 659, Pittsburg 66762, R. E. Wade, V. P. & Gen. Mgr.
WIBW-TV (Ch 13), Box 119, Topeka 66601, Thad M. Sandstrom, V. P. & Gen. Mgr.
*KTWU (Ch 11), Washburn University of Topeka, Topeka 66604. Ian N. Wheeler, Dir.
KAKE-TV (Ch 10), 1500 N. West St, Wichita 67203, Martin Umansky, V. P. & Gen. Mgr.
KARD-TV (Ch 3), 833 N. Main St, Wichita 67203, Don Sbarra, Exec. V. P. & Gen. Mgr.
KTVH (Ch 12), 2815 E. 37th St, Wichita 67216, M. Dale Larsen, V. P. & Gen. Mgr.

KENTUCKY
WLTV (Ch 13), Box 130, Bowling Green 42101, J. M. Walters, V.P. & Gen. Mgr.
WKYT-TV (Ch 27), Box 655, Lexington 40501, Jack Remington, Gen. Mgr.
WHAS-TV (Ch 11), 525 W. Broadway, Louisville 40202, Victor A. Sholis, V. P. & St. Dir.
WAVE-TV (Ch 3), 725 S. Floyd St, Louisville 40203, T. Ballard Morton, Pres.
*WFPK (Ch 15), 2301 Clarnedon Av, Louisville, Kenneth F. Lam, Exec. Dir.
WLEX-TV (Ch 18), Box 1457, Lexington 40501, Harry G. Barfield, V. P. & Gen. Mgr.
WLKY (Ch 32), 3947 Park Dr, Louisville 40216, Ed Shadburne, Gen. Mgr.
WPSD-TV (Ch 6), Box 1037, Paducah 42001, Sam Livingston, Gen. Mgr.

LOUISIANA
KALB-TV (Ch 5), 605 Washington St, Alexandria 71301, Robert E. Miller, Gen. Mgr.
WAFB-TV (Ch 9), 844 Government St, Baton Rouge 70802, Tom E. Gibbens, Pres. & Gen. Mgr.
WBRZ (Ch 2), 1650 Highland Rd, Baton Rouge 70802, Douglas L. Manship, Pres. & Gen. Mgr.
KATC (Ch 3), Box 3347, Lafayette 70504, William Patton, Gen. Mgr.
KLFY-TV (Ch 10), Box 3687, Lafayette 70504, Thomas G. Pears, Gen. Mgr.
KPLC-TV (Ch 7), 320 Division St, Lake Charles 70601, Pelham Mills, Jr, Pres.
KNOE-TV (Ch 8), Knoe Rd, Monroe 71201, Paul H. Goldman, Exec. V. P. & Gen. Mgr.
WDSU-TV (Ch 6), 520 Royal St, New Orleans 70130, A. Louis Read, Pres.
WVUE (Ch 12), 1422 Cleveland Ave, New Orleans 70112, Douglas J. Elleson, V. P. & Gen. Mgr.
WWL-TV (Ch 4), 1024 N. Rampart St, New Orleans 70116, Michael Early, Gen. Mgr.
*WYES (Ch 8), 916 Navarre Ave, New Orleans 70124, W. S. Hart, Gen. Mgr.
KSLA-TV (Ch 12), Box 92, Shreveport 71102, Winston B. Linam, V. P. & Gen. Mgr.
KTAL-TV (Ch 6), 3150 N. Market St, Shreveport 71107, James M. Dugan, V. P.
KTBS-TV (Ch 3), 312 E. Kings Highway, Shreveport 71104, E. Newton Wray, Pres. & Gen. Mgr.

MAINE
*WCBB (Ch 10), Bates College, Augusta 04240, Elmore B. Lyford, Dir.
WABI-TV (Ch 5), 35 Hildreth St, Bangor 04401, Walter Dickson, Pres. & Gen. Mgr.
WEMT (Ch 7), 41 Farm Rd, Bangor 04401, William H. Hart, St. Mgr.
WLBZ-TV (Ch 2), Box 732, Bangor 04401, Rudolph Marcoux, Gen. Mgr.
*WMED (Ch 13), Calais.
*WMEB (Ch 12), Orono.
*WMEM (Ch 10), Alumni Hall, University of Maine, Orono 04473, John W. Dunlop, Gen. Mgr.
WCSH-TV (Ch 6), 579 Congress St, Portland 04101, Jack Atwood, V. P. & Gen. Mgr.
WGAN-TV (Ch 13), 390 Congress St, Portland 04111, Donald Moeller, V. P. & Gen. Mgr.
WMTW-TV (Ch 8), Congress Bldg, Portland 04101, Robert Maynard, V. P. & Gen. Mgr.
WAGM-TV (Ch 8), Box 749, Presque Isle 04769, Stanley Lyons, Gen. Mgr.

MARYLAND
WBAL-TV (Ch 11), 3800 Hooper Ave, Baltimore 21211, Brent Gunts, V. P. & Gen. Mgr.
WJZ-TV (Ch 13), Television Hill, Baltimore 21211, Kenneth T. MacDonald, Gen. Mgr.
WMAR-TV (Ch 2), 6400 York Rd, Baltimore 21212, Donald Campbell, V. P. & Gen. Mgr.
WBOC-TV (Ch 16), Radio Park, Salisbury 21801, Charles Truitt, V. P. & Gen. Mgr.

MASSACHUSETTS
WBZ-TV (Ch 4), 1170 Soldiers Field Rd, Boston 02134, Lamont L. Thompson, Gen. Mgr.
WHDH-TV (Ch 5), 50 Morrissey Blvd, Boston 02125, William B. McGrath, Exec. V. P.
WIHS-TV (Ch 38), 25 Granby St, Boston 02215, William J. Flynn, Gen. Mgr.
WNAC-TV (Ch 7), 21 Brookline Ave, Boston 02215, William McCormick, V. P. & Gen. Mgr.
*WGBH (Ch 2), 125 Western Ave, Boston 02134, Hartford N. Gunn Jr, Gen. Mgr.
WTEV (Ch 6), Television Center, New Bedford 02740, Vance L. Eckersley, Gen. Mgr.
WHYN-TV (Ch 40), 1300 Liberty St, Springfield, 01104, Charles DeRose, V. P. & Gen. Mgr.
WWLP (Ch 22), Box 2210, Springfield 01101, William Putnam, Pres. & Gen. Mgr.

MICHIGAN
WWTV (Ch 9), Box 627, Cadillac 49601, Gene Ellerman, V. P. & Gen. Mgr.
CKLW-TV (Ch 9), Guardian Bldg, Detroit 48226, S. Campbell, Ritchie, Pres. & Gen. Mgr.
WJBK-TV (Ch 2), 7441 Second Blvd, Detroit 48202, Lawrence Carino, V. P. & Gen. Mgr.
WWJ-TV (Ch 4), 622 Lafayette Blvd, Detroit 48226, James Schiavone, Gen. Mgr.
*WTVS (Ch 56), 5035 Woodward, Detroit, Dr. Paul Rickard, Mgr.
WJRT-TV (Ch 12), 2302 Lapeer Rd, Flint 48503, Albert J. Gillen, Exec. V. P. & Gen. Mgr.
WOOD-TV (Ch 8), 120 College Ave, S.E, Grand Rapids 49502, Willard Schroeder, V. P. & Gen. Mgr.
WZZM-TV (Ch 13), Television Center, Grand Rapids 49502, William C. Dempsey, Exec. V. P. & Gen. Mgr.
WILX-TV (Ch 10), Box 380, Jackson 49204, William J. Hart, Gen. Mgr.
WKZO-TV (Ch 3), 590 W. Maple St, Kalamazoo 49001, Carl E. Lee, Exec. V. P. & Gen. Mgr.
*WMSB (Ch 10), 600 Kalamazoo St, East Lansing 48823, Dr. Armand L. Hunter, Dir. of Broadc. Services.
WJIM-TV (Ch 6), E. Saginaw at Howard St, Lansing 48912, Harold F. Gross, Pres.
WLUC-TV (Ch 6), Box 479, Marquette 49855, Elroy E. Strand, Gen Mgr.
WKNX-TV (Ch 57), 221 S. Washington Ave, Saginaw 48607, William J. Edwards, Pres. & Gen. Mgr.
WNEM-TV (Ch 5), 5700 Becker Rd, Saginaw 48601, James Gerity Jr, Pres. & Gen. Mgr.
WKBD-TV (Ch 50), Box 359, Southfield 48077, Richard L. Freeman, Gen. Mgr.
WXYZ-TV (Ch 7), 20777 W. 10 Mile Rd, Southfield 48076, John Campbell, Pres. & Gen. Mgr.
WPBN-TV (Ch 7), Paul Bunyan Bldg, Traverse City 49684, Soren H. Munkhof, Gen. Mgr.
*WUCM (Ch 19), Delta College, University Center 48710, William J. Ballard, Dir. of TV.

MINNESOTA
KCMT-TV (Ch 7), Box 614, Alexandria 56308, Glenn W. Flint, Gen. Mgr.
KMMT (Ch 6), Austin 55912, Duane Estvold, Mgr.
KDAL-TV (Ch 3), 10 E. Superior, Duluth 55802, Odin S. Ramsland, Gen. Mgr.
WDIO-TV (Ch 10), 10 Observation Rd, Duluth 55811, Frank Befera, Pres. & Gen. Mgr.
WDSM-TV (Ch 6), 230 E. Superior St, Duluth 55802, Robert J. Rich, Gen. Mgr.
*WDSE (Ch 8), 406 Bradley Bldg, Duluth, George A. Beck, St. Mgr.
KEYC-TV (Ch 12), P.O. Box 12, Mankato 56001, Donald Harrer, V. P. & St. Mgr.
KMSP-TV (Ch 9), Foshay Tower, Minneapolis 55402, Donald Swartz, Pres. & Gen. Mgr.
WCCO-TV (Ch 4), 50 S. Ninth St, Minneapolis 55402, F. Van Konynenburg, Exec. V. P. & Gen. Mgr.
WTCN-TV (Ch 11), 2925 Dean Blvd, Minneapolis 55416, Robert C. Fransen, V. P. & Gen. Mgr.
*KTCA (Ch 2), Minneapolis-St. Paul.
*KTCI (Ch 17), Minneapolis-St. Paul.

KROC-TV (Ch 10), 100 First Ave. Bldg, Rochester 55901, David Gentling, V. P. & Gen. Mgr.
KSTP-TV (Ch 5), 3415 University Ave, St. Paul 55114, Stanley S. Hubbard, V. P. & Gen. Mgr.
*KWCM (Ch 10), 1640 Como Av, St. Paul 55108, John C. Schwartswalder, Exec. V. P. & Gen. Mgr.

MISSISSIPPI

WLOX-TV (Ch 3), Buena Vista Hotel, Biloxi 39533, Ray Butterfield, Gen. Mgr.
WCBI-TV (Ch 4), Box 271, Columbus 39702, William Whitfield, Gen. Mgr.
WABG-TV (Ch 6), Box 414, Greenwood 38930, Cy N. Bahakel, Pres. & Gen. Mgr.
WDAM-TV (Ch 7), Box 1649, Hattiesburg 39401, Marvin Reuben, Gen. Mgr.
WJTV (Ch 12), Box 8187, Jackson 39204, L. M. Sepaugh, Gen. Mgr.
WLBT (Ch 3), 715 S. Jefferson St, Jackson 39201, Bob McRainey Jr, Gen. Mgr.
WTOK-TV (Ch 11), Box 1771, Meridian 39302, Robert Wright, Pres. & Gen. Mgr.
WTWV (Ch 9), Box 350, Tupelo 38801, Frank Spain, Pres. & Gen. Mgr.

MISSOURI

KFVS-TV (Ch 12), 324 Broadway, Cape Girardeau 63701, Oscar C. Hirsch, Pres.
KOMU-TV (Ch 8), Highway 63, South, Columbia 65201, Glenn Griswold, St. Mgr.
KRCG-TV (Ch 13), Highway 54, North, Jefferson City 65101, Robert Blosser, Gen. Mgr.
KODE-TV (Ch 12), 1928 W. 13th St, Joplin 64803, D. T. Knight, V. P. & Gen. Mgr.
WDAF-TV (Ch 4), Signal Hill, Kansas City 64108, Robert Wormington, Gen. Mgr.
KCMO-TV (Ch 5), 125 E. 31st St, Kansas City 64108, E. K. Hartenbower, V. P. & Gen. Mgr.
KMBC-TV (Ch 9), 11th & Central, Kansas City 64105, Mark Wodlinger, V. P. & Gen. Mgr.
*KCSD (Ch 19), 1211 McGee St, Kansas City 64106, Zoel Parenteau, St. Mgr.
KFEQ-TV (Ch 2), 40th & Faraon St, St. Joseph 64506, Thomas Mathews, V. P. & Gen. Mgr.
KMOX-TV (Ch 4), 1215 Cole St, St. Louis 63106, Gene Wilkey, V. P. & Gen. Mgr.
KPLR-TV (Ch 11), Video City, St. Louis 63108, Michael McCormick, V. P. & Gen. Mgr.
KSD-TV (Ch 5), 1111 Olive St, St. Louis 63101, Harold Grams, Gen. Mgr.
KTVI-TV (Ch 2), 5915 Berthold Ave, St. Louis 63110, Ralph Hansen, V. P. & Gen. Mgr.
*KETC (Ch 9), 6996 Millbrook Rd, St. Louis 63130, Robert C. Glazier, Gen. Mgr.
KTTS-TV (Ch 10), 2650 E. Division St, Springfield 68053, G. Pearson Ward, Gen. Mgr.
KYTV (Ch 3), Box 2266, Springfield 65803, Carl Fox, Co-Mgr.

MONTANA

KOOK-TV (Ch 2), Box 2557, Billings 59103, Cliff Ewing, Gen. Mgr.
KULR-TV (Ch 8), Box 2512, Billings 59103, Thor Myhre, Pres. & Gen. Mgr.
KXLF-TV (Ch 4), 1003 S. Montana St, Butte 59701, E. L. Piess, Gen. Mgr.
KXGN-TV (Ch 5), Box 205, Glendive 59330, Gerry Robbins, Gen. Mgr.
KFBB-TV (Ch 5), Box 1139, Great Falls 59401, Don McClintock, V. P. & Gen. Mgr.
KRTV (Ch 3), Box 1331, Great Falls 59401, Don Bradley, Gen. Mgr.
KBLL-TV (Ch 12), 2433 N. Montana Ave, Helena 58601, Douglas Sutherland, Gen. Mgr.
KGVO-TV (Ch 13), 340 W. Main St, Missoula 59801, W. C. Blanchette, Gen. Mgr.

NEBRASKA

KHAS-TV (Ch 5), Box 578, Hastings 68901, Duane L. Watts, V. P. & Gen. Mgr.
KHOL-TV (Ch 13), 414 E. Ave, Holdredge 68949, Robert Brewster, St. Mgr.
*KLNE (Ch 3), Lexington
KOLN-TV (Ch 10), 40th & West Sts, Lincoln 68501, A. James Ebel, V. P. & Gen. Mgr.
*KUON (Ch 12), 12th and R Streets, Lincoln 68508, Jack McBride, Gen. Mgr.
*KYNE (Ch 26), 12th and R Streets, Lincoln 68508, Jack McBride, Gen. Mgr.
KNOP-TV (Ch 2), Box 749, N. Platte 69101, Harry Peck, Gen. Mgr.
KETV (Ch 7), 27th & Douglas Sts, Omaha 68131, Eugene S. Thomas, Exec. V. P. & Gen. Mgr.
KMTV (Ch 3), 2615 Farnam St, Omaha 68131, Owen Saddler, Exec. V. P. & Gen. Mgr.
WOW-TV (Ch 6), 3501 Farnam St, Omaha 68131, Howard L. Stalnaker, V. P. & Gen. Mgr.

NEVADA

KORK-TV (Ch 2), Box 550, Las Vegas 89101, Edward R. Tabor, V. P. & Gen. Mgr.
KSHO-TV (Ch 13), Box 2586, Las Vegas 89104, Alex Gold, Pres. & Gen. Mgr.
KLAS-TV (Ch 8), 250 E. Desert Inn Rd, Las Vegas 89109, Mark Smith, St. Mgr.
KCRL-TV (Ch 4), 1790 Vassar St, Reno 89502, Roger Van Duzer, St. Mgr.
KOLO-TV (Ch 8), 770 E. 5th St, Reno 89502, Philip G. Rose, V. P. & Gen. Mgr.

NEW HAMPSHIRE

*WENH (Ch 11), Box 2, Durham 03824, Keith J. Nighbert, Gen. Mgr.
WMUR-TV (Ch 9), 1819 Elm St, Manchester 03104, S. E. Phillips, V. P. & Gen. Mgr.

NEW JERSEY

WNJU-TV (Ch 47), 1020 Broad St, Newark 07102, Edward Cooperstein, Pres. & Gen. Mgr.
WCMC-TV (Ch 40), 3010 New Jersey Ave, Wildwood 08260, William C. Wotring Jr, Gen. Mgr.

NEW MEXICO

KGGM-TV (Ch 13), Box 1294, Albuquerque 87103, Bruce Hebenstreit, Gen. Mgr.
KOAT-TV (Ch 7), 1377 University Blvd, N. E, Albuquerque 87106, Max A. Sklower, St. Mgr.
KOB-TV (Ch 4), Box 1351, Albuquerque 87103, Jerry Danziger, St. Mgr.
*KNME (Ch 5), 1801 Roma, N. E, Albuquerque 87106, F. Claude Hempen, Mgr.
KAVE-TV (Ch 6), P.O. Box 1538, Carlsbad 88220, John Deme, Pres. & Gen. Mgr.
KBIM-TV (Ch 10), 308 N. Main, Roswell 88201, W. H. Bailey, St. Mgr.
KSWS-TV (Ch 8), 1717 W. Second St, Roswell 88201, John A. Barnett, Gen. Mgr.

NEW YORK

WAST (Ch 13), P.O. Box 4035, Albany 12204, William Riple, Gen. Mgr.
WTEN (Ch 10), P.O. Box 10, Albany 12201, Kenneth M. Johnson, V. P. & Gen. Mgr.
WNBF (Ch 10), Sheraton Inn, Binghampton 13902, George Dunham, Gen. Mgr.
WBJA-TV (Ch 34), Ingraham Hill Road, Binghamton 13903, Alfred Anscombe, Pres. & Gen. Mgr.
WINR-TV (Ch 40), 70 Henry St, Binghamton 13901, Edward Scala, Gen. Mgr.
WBEN-TV (Ch 4), 2077 Elmwood Ave, Buffalo 14207, C. Robert Thompson, Gen. Mgr.
WGR-TV (Ch 2), 184 Barton St, Buffalo 14213, Robert Wiegand, V. P. & Gen. Mgr.
WKBW-TV (Ch 7), 1420 Main St, Buffalo 14209, Robert King, V. P. & Gen. Mgr.
*WNED (Ch 17), Lafayette Hotel, Buffalo 14203, J. Michael Collins, Gen. Mgr.
*WCNY (Ch 24), Old Liverpool Rd, Liverpool 13088, Thomas Petry, Gen. Mgr.
WABC-TV (Ch 7), 1330 Ave. of the Americas, New York 10019, Richard L. Beesemyer, V. P. & Gen. Mgr.
WCBS-TV (Ch 2), 51 W. 52nd St, New York 10019, Clark George, V. P. & Gen. Mgr.
WNBC-TV (Ch 4), 30 Rockefeller Plaza, New York 10020, Theodore H. Walworth Jr, Gen. Mgr.
WNEW-TV (Ch 5), 205 E. 67th St, New York 10021, Lawrence P. Fraiberg, V. P. & Gen. Mgr.
WOR-TV (Ch 9), 1440 Broadway, New York 10018, Jerome Bess, V. P. & St. Mgr.
WPIX-TV (Ch 11), 220 E. 42nd St, New York 10017, Fred Thrower, Pres.
*WNDT (Ch 13), 304 W. 58th St, New York 10019, John W. Kiermaier, Pres.
*WNYC (Ch 31), 2500 Municipal Bldg, New York, Seymour N. Siegel, Dir.
WPTZ (Ch 5), 357–361 Cornelia St, Plattsburgh 12901, W. P. Eaton, Jr. Gen. Mgr.

WHEC-TV (Ch 10), 191 E. Avenue, Rochester 14604, C. Glover Delaney, V. P. & Gen. Mgr.
WOKR-TV (Ch 13), 17 Clinton Ave. South, Rochester 14604, Richard Landsman, Pres. & Gen. Mgr.
WROC-TV (Ch 8), WROC Broadcast Center, Rochester 14610, Ervin F. Lyke, V. P. & Gen. Mgr.
WRGB (Ch 6), 1400 Balltown Rd, Schenectady 12309, Reid L. Shaw V. P. & Gen. Mgr.
*WMHT (Ch 17), P.O. Box 17, Schenectady 12301 ,Donald E. Schein, Gen. Mgr.
WNYS-TV (Ch 9), Box 9, Syracuse 13201, John E. McArdle, Gen. Mgr.
WHEN-TV (Ch 5), 980 James St, Syracuse 13203, Paul Adanti, V. P. & Gen. Mgr.
WSYR-TV (Ch 3), 1030 James St, Syracuse 13203, E. R. Vadeboncoeur, Pres.
WKTV (Ch 2), P.O. Box 386, Utica 13503, Sheldon F. Storrier, V. P. & Gen. Mgr.
WNNY-TV (Ch 7), 260 Washington St, Watertown 13601, James Higgins, Gen. Mgr.

NORTH CAROLINA

WISE-TV (Ch 62), 75 Scenic Highway, Asheville 28804, Harold H. Thoms, Pres.
*WUNC (Ch 4), Chapel Hill.
*WUNB (Ch 2), University of North Carolina, Chapel Hill 27514, John Young, Dir. of TV.
WBTV (Ch 3), 1 Julian Price Pl, Charlotte 28208, Wallace Jorgenson, V. P. & Gen. Mgr.
WCCB-TV (Ch 36), 1 Television Pl, Charlotte 28205, Lew Sadler, Gen. Mgr.
WSOC-TV (Ch 9), Box 2536, Charlotte 28201, C. George Henderson, Exec. V. P. & Gen. Mgr.
*WTVI (Ch 42), 42 Coliseum Dr, Charlotte 28205, Miss Dona Lee Davenport, St. Mgr.
WTVD-TV (Ch 11), P.O. Box 2009, Durham 27702, J. Floyd Fletcher, Gen. Mgr.
WFMY-TV (Ch 2), Phillips Ave, & White St, Greensboro 27405, William A. Gietz, V. P. & Gen. Mgr.
WNCT-TV (Ch 9), Box 898, Greensville 27834, Hank Tribley, Exec. V. P. & Gen. Mgr.
WGHP-TV (Ch 8), 314 N. Main St, High Point 27260, James W. Coan, Pres. & Gen. Mgr.
WNBE-TV (Ch 12), Box 2325, New Bern 28562, Nathan Frank, Pres. & Gen. Mgr.
WRAL-TV (Ch 5), 2619 Western Blvd, Raleigh 27606, Fred Fletcher, Exec. V. P. & Gen. Mgr.
WITN-TV (Ch 7), Box 468, Washington, W. R. Roberson, Jr, Pres. & Gen. Mgr.
WECT (Ch 6), 205 W. Shipyard Blvd, Wilmington 28401, Dan D. Cameron, Pres.
WWAY (Ch 3), Murchison Bldg, Wilmington 28402, Charles B. Britt, Gen. Mgr.
WSJS-TV (Ch 12), 419 N. Spruce St, Winston-Salem 27101, Harold Essex, Pres. & Gen. Mgr.

NORTH DAKOTA

KFYR-TV (Ch 5), Box 1738, Bismarck 58501, Myron Atkinson, V. P. & Gen. Mgr.
KXMB-TV (Ch 12), Box 1617, Bismarck 58501, David J. Blackstead, V. P. & Gen. Mgr.
KDIX-TV (Ch 2), Box 1248, Dickinson 58601, Stanley Deck, Gen. Mgr.
WDAY-TV (Ch 6), 207 N. Fifth St, Fargo, 58101, Jack Lester, Gen. Mgr.
KTHI-TV (Ch 11), Box 1878, Fargo 58103, Lowell Johnson, St. Mgr.
*KFME (Ch 13), Box 6, Fargo 58102, Clair R. Tettemer, Gen. Mgr.
KCND-TV (Ch 12), Box 191, Pembina 58271, Richard Vincent, Gen. Mgr.

OHIO

WAKR-TV (Ch 49), Box 90, Akron 44309, Roger G. Berk, V. P. & Gen. Mgr.
*WOUB (Ch 20), Ohio University, Athens 45701, Presley D. Holmes Jr, Gen. Mgr.
*WGBU (Ch 70), Bowling Green State University, Bowling Green, Duane E. Tucker, Gen. Mgr.
WCPO-TV (Ch 9), 2345 Symmes St, Cincinnati 45206, Robert Gordon, Gen. Mgr.
WKRC-TV (Ch 12), 1906, Highland Ave, Cincinnati 45219, Sam Johnston, V. P. & Gen. Mgr.
WLW-TV (Ch 4), 140 W. Ninth St, Cincinnati, Walter E. Bartlett, V. P. & Gen. Mgr.
*WCET (Ch 48), 2222 Chickasae St, Cincinnati 45219, Uberto. T Neely, Gen. Mgr.
WEWS (Ch 5), 3001 Euclid Ave, Cleveland 44115, Donald L. Perris, Gen. Mgr.
WJW-TV (Ch 8), 1630 Euclid Ave, Cleveland 44115, Kenneth Bagwell, V. P. & Gen. Mgr.
WKYC-TV (Ch 3), 1403 E. Sixth St, Cleveland 44114, Arthur A. Watson, V. P. & Gen. Mgr.
*WVIZ (Ch 25), 4600 Detroit Ave, Cleveland 44102, Miss Betty Cope, Gen. Mgr.
WBNS-TV (Ch 10), 770 Twin Rivers Dr, Columbus 43212, Richard A. Borel, Pres.
WLW-C (Ch 4), 3165 Olentangy River Rd, Columbus 43202, Richard Reed, V. P. & Gen. Mgr.
WTVN-TV (Ch 6), 753 Harmon Ave, Columbus 43223, Fred Von Stade, Gen. Mgr.
*WOSU (Ch 34), 2470 North Star Rd, Columbus 43221, Richard B. Hull, Mgng Dir.
WHIO-TV (Ch 7), 1414 Wilmington Ave, Dayton 45420, Robert H. Moody, Exec. V. P. & Gen. Mgr.
WKEF-TV (Ch 22), 1731 Soldiers Home & W. Carrollton Rd, Dayton 45409, George J. Mitchell, Gen. Mgr.
WLW-D (Ch 2), 4595 S. Dixie Highway, Dayton 45439, Donald Dahlman, V. P. & Gen. Mgr.
WIMA-TV (Ch 35), 1524 Rice Ave, Lima 45805, Robert Mack, Gen. Mgr.
*WGSF (Ch 28), 9–19 North Fifth St, Newark 43055, Leland Hubbell, Chief Eng.
*WMUB (Ch 14), Oak at Spring St, Oxford 45056, Stephen C. Hathaway, Dir. of Broadc.
WSTV (Ch 9), 428 Market St, Steubenville 43952, Theodore Eiland, V. P. & Gen. Mgr.
WDHO-TV (Ch 24), Commodore Perry Hotel, Toledo 43603, Charles Thomas, V. P. & Gen. Mgr.
WSPD-TV (Ch 13), 136 Huron St, Toledo 43604, Keith T. McKenney, V. P. & Gen. Mgr.
WTOL-TV (Ch 11), 604 Jackson St, Toledo 43604, Charles A. Batson, Gen. Mgr.
*WGTE (Ch 30), Manhattan Blvd. at Elm, Toledo 43608, Harry D. Lamb, Gen. Mgr.
WKBN-TV (Ch 27), 3930 Sunset Blvd, Youngstown 44512, W. P. Williamson Jr, Pres. & Gen. Mgr.
WFMJ-TV (Ch 21), 101 W. Boardman St, Youngstown 44503, William F. Maag Jr, Pres.
WYTV-TV (Ch 33), 3800 Shady Run Rd, Youngstown 44502, Howard D. Duncan Jr, Exec. V. P. & Gen. Mgr.
WHIZ-TV (Ch 18), N. Fifth St, Zanesville 43701, Robert Hodous, Gen. Mgr.

OKLAHOMA

KTEN (Ch 10), Box 10, Ada 74820, Bill Hoover, Pres. & Gen. Mgr.
KSWO-TV (Ch 7), P.O. Box 708, Lawton 73502, R. H. Drewry, Pres. & Gen. Mgr.
KOCO-TV (Ch 5), Box 16538, Oklahoma City, 73116, Ben K. West, V. P. & Gen. Mgr.
KWTV (Ch 9), Box 14788 Oklahoma City 73114, Edgar T. Bell, V. P. & Gen. Mgr.
WKY-TV (Ch 4), Box 14668 Oklahoma City 73114, Norman P. Bagwell, V. P.
*KETA (Ch 13), Oklahoma City.
*KOKH (Ch 25), 1801 North Ellison, Oklahoma City, Mervel Lunn, Dir. of Broadc.
KTUL (Ch 8), Box 9697, Tulsa 74107, William D. Swanson, V. P. & Gen. Mgr.
KOTV (Ch 6), 302 S. Frankfort St, Tulsa 74120, George Stevens. V. P. & Gen. Mgr.
KVOO-TV (Ch 2), 3701 S. Peoria, Tulsa 74105, John Devine, Exec. V. P. & Gen. Mgr.
*KOED (Ch 11), Box 2146, Tulsa 73069, John W. Dunn, Dir.

OREGON

*KOAC (Ch 7), Educational Media, Covell Hall 97331, Luke F. Lamb, Dir.
KEZI-TV (Ch 9), 2225 Coburg Rd, Eugene 97401, Don Tykeson, V. P. & Gen. Mgr.
KVAL-TV (Ch 13), Box 1313, Eugene 97401, S. W. McCready, Gen. Mgr.
KOTI (Ch 2), 239 Main St, Klamath Falls 97601, Don R. Stonehill, St. Mgr.
KMED-TV (Ch 10), P.O. Box 10, Medford 97501, Ray Johnson, Exec. V. P. & Gen. Mgr.
KTVM (Ch 5), 2000 Crater Lake Highway, Medford 97501, Jerold R. Poulos, V. P. & St. Mgr.
KATU-TV (Ch 2), 2153 N. E. Sandy Blvd, Portland 97232, William J. Hubbach, V. P. & Gen. Mgr.
KGW-TV (Ch 8), 1501 S. W. Jefferson, Portland 97201, Ancil H. Payne, V. P. & Gen. Mgr.

KOIN-TV (Ch 6), 140 S. W. Columbia St, Portland 97201, C. Howard Lane, Pres. & Mng. Dir.
KPTV (Ch 12), Box 3401, Portland 97208, John S. Hansen, Pres. & Gen. Mgr.
*KOAP (Ch 10), Educational Media, 2828 S. W. Front Av, Portland 97201, Luke F. Lamb, Dir.

PENNSYLVANIA

WFBG-TV (Ch 10), 5000 Sixth Ave, Altoona 16602, John Stilli, Gen. Mgr.
*WLVT (Ch 39), South Mountain Dr. West, Bethlehem 18015, Sheldon P. Siegel, Gen. Mgr.
WNEP-TV (Ch 16), Wilkes Barre-Scranton Airport, Avoca 18641, Thomas P. Shelburne, Gen. Mgr.
WICU-TV (Ch 12), 3514 State St, Erie, Art Ingram, Gen. Mgr.
WSEE-TV (Ch 35), 1220 Peach St, Erie 16501, Edward Zellefrow, Gen. Mgr.
WJET-TV (Ch 24), 1635 Ash St, Erie 16503, Myron Jones, Pres.
WHP-TV (Ch 21), 216 Locust St, Harrisburg 17101, Cecil M. Sansbury, Exec. V. P. & Gen. Mgr.
WTPA-TV (Ch 27), 3235 Hoffman St, Harrisburg 17110, Paul S. Abbott, Gen. Mgr.
*WITF (Ch 33), Box Z, Hershey 17033, Lloyd Kaiser, Gen. Mgr.
WIBF-TV (Ch 29), Box 8828, Jenkintown 19117, William H. Vogt, Gen. Mgr.
WJAC-TV (Ch 6), Box 599, Johnstown 15907, Alvin D. Schrott, Exec. V. P. & Gen. Mgr.
WARD-TV (Ch 56), 301 Franklin St, Johnstown 15901, William D. Confer, Gen. Mgr.
WGAL-TV (Ch 8), 8 West King St, Lancaster 17603, Clair McCollough, Pres. & Gen. Mgr.
WLYH-TV (Ch 15), Television Hill, Lebanon 17402, Jayson Sondheim, Gen. Mgr.
KYW-TV (Ch 3), 1619 Walnut St, Philadelphia 19103, Fred Walker, Gen. Mgr.
WCAU-TV (Ch 10), City & Monument Ave, Philadelphia 19131, Bruce S. Bryant, V. P. & Gen. Mgr.
WFIL-TV (Ch 6), 4100 City Line Ave, Philadelphia 19131, Roger Clipp, V. P. & Gen. Mgr.
WKBS-TV (Ch 48), 3201 South 26th St, Philadelphia 19145, Richard K. Jolliffe, Gen. Mgr.
WPHL-TV (Ch 17), 230 South 15th, Philadelphia 19102, Larry Cooper, St. Mgr.
*WUHY (Ch 35), 4548 Market St, Philadelphia 19139, Warren A. Kraetzer, Exec. V. P. & Gen. Mgr.
KDKA-TV (Ch 2), 1 Gateway Center, Pittsburgh 15222, Paul G. O'Friel, Gen. Mgr.
WIIC-TV (Ch 11), 341 Rising Main St, Pittsburgh 15214, Robert A. Mortensen, Exec. V. P. & Gen. Mgr.
WTAE-TV (Ch 4), 400 Ardmore Blvd, Pittsburgh 15218, Franklin Snyder, V. P. & Gen. Mgr.
*WQEX (Ch 16), 4337 Fifth Ave, Pittsburgh 15213, Donald V. Taverner, Pres.
WDAU-TV (Ch 22), 1000 Wyoming, Scranton 18509, Mrs. M. M. Holcomb, Gen. Mgr.
*WPSX-TV (Ch 3), 201 Wagner, University Park, Marlowe Froke, Dir. of Broadc.
WBRE-TV (Ch 28), 62 So. Franklin St, Wilkes Barre 18701, David Baltimore, V. P. & Gen. Mgr.
WSBA-TV (Ch 43), Box 1868, York 17405, Robert M. Stough, St. Mgr.

RHODE ISLAND

WJAR-TV (Ch 10), 176 Weybosset St, Providence 02903, J. S. Sinclair, Pres. & Gen. Mgr.
WPRO-TV (Ch 12), 24 Mason St, Providence 02903, Peter C. Newell, V. P. & Gen. Mgr.

SOUTH CAROLINA

WAIM-TV (Ch 40), 321 Kingsley Rd, Anderson 29623, Glenn Warnock, Gen. Mgr.
WCSC-TV (Ch 5), 485 East Bay, Charleston 29403, John M. Rivers, Pres. & Gen. Mgr.
WUSN-TV (Ch 2), Box 879, Charleston 29402, Douglas M. Bradham, V. P. & Gen. Mgr.
*WITV (Ch 7), Charleston.
WIS-TV (Ch 10), 1111 Bull St, Columbia 29201, Carter Hardwick, Sr V. P. & Gen. Mgr.
WNOK-TV (Ch 19), Box 5307, Columbia 29205, H. Moody Mc Elveen Jr, Exec. V. P.
WOLO-TV (Ch 25), Box 4217, Columbia 29204, Gerald Quick, St. Mgr.
*WNTV (Ch 29), 2712 Millwood Ave, Columbia 29205, Henry J. Cauthen, Exec. Dir.
WBTW-TV (Ch 13), Box 630, Florence 29501, J. William Quinn, Mng. Dir.
WFBC-TV (Ch 4), Box 788, Greenville 26902, Wilson Wearn, Exec. V. P. & Gen. Mgr.
WLOS-TV (Ch 13), Box 2363, Greenville 29602, Morton S. Cohn, V. P. & Gen. Mgr.
WCIV-TV (Ch 4), Highway 703, Mount Pleasant 29464, William Lucas, V. P. & Gen. Mgr.
WRDW-TV (Ch 12), Georgia & Observatory Ave, N. Augusta 29841, Virgil B. Wolff, V. P. & Gen. Mgr.
WSPA-TV (Ch 7), 123 N. Converse St, Spartanburg 29302, Charles Sanders, V. P. & Gen. Mgr.

SOUTH DAKOTA

KORN-TV (Ch 5), P.O. Box 908, Mitchell 57301, R. V. Eppel, Pres. & Gen. Mgr.
KOTA-TV (Ch 3), Box 1752, Rapid City 57702, Miss Helen S. Duhamel, Pres. & Gen. Mgr.
KRSD-TV (Ch 7), 1438 Mountain View Rd, Rapid City 57704, Eli Daniels, Pres. & Gen. Mgr.
KELO-TV (Ch 11), Phillips at 13th St, Sioux Falls 57102, Evans Nord, Exec. V. P. & Gen. Mgr.
KSOO-TV (Ch 13), 205 No. Phillips Ave, Sioux Falls 57102, Morton Henkin, Pres. & Gen. Mgr.
*KUSD (Ch 2), Union Bldg, University of South Dakota, Vermillion, 57609 Martin P. Busch, Dir.

TENNESSEE

WCYB-TV (Ch 5), P.O. Box 603, Bristol 37621, R. H. Smith, Pres. & Gen. Mgr.
WDEF-TV (Ch 12), Broadcast Center, Chattanooga 37402, C. M. Parham, Exec. V. P. & Gen. Mgr.
WRCB-TV (Ch 3), 1214 McCallie Ave, Chattanooga 37404, H. D. Burke, V. P. & Gen. Mgr.
WTVC-TV (Ch 9), Box 1150, Chattanooga 37401, R. R. Owen, V. P. & Gen. Mgr.
WDXI-TV (Ch 7), Williams Bldg, Jackson 38302, John E. North, V. P. & Gen. Mgr.
WJHL-TV (Ch 11), 137–145 West Main St, Johnson City 37601, W. Hanes Lancaster Jr, Exec. V. P. & Gen. Mgr.
WATE-TV (Ch 6), 1306 Broadway N. E, Knoxville 37917, W. H. Linebaugh, Exec. V. P. & Gen. Mgr.
WBIR-TV (Ch 10), 1513 Hutchinson Av, Knoxville 37917, John Hart, Gen. Mgr.
WTVK-TV (Ch 26), Box 1388, Knoxville 37901, J. A. Engelbrecht, Pres. & Gen. Mgr.
WHBQ-TV (Ch 13), 485 S. Highland, Memphis 38111, D. A. Noel, V. P. & Gen. Mgr.
WMCT (Ch 5), 1960 Union Ave, Memphis 38104, H. W. Slavick, V. P. & Gen. Mgr.
WREC-TV (Ch 3), Hotel Peabody Bldg, Memphis 38101, Charles B. Brakefield, Pres. & Gen. Mgr.
*WKNO (Ch 10), Box 80000, Memphis State University, Memphis 38111, H. D. Holst, Mng. Dir.
WLAC-TV (Ch 5), 159 Fourth Av, N. Nashville 37210, T. B. Baker Jr, Exec. V. P. & Gen. Mgr.
WSIX-TV (Ch 8), 441 Murfreesboro Rd, Nashville 37210, E. S. Tanner, Exec. V. P. & Gen. Mgr.
WSM-TV (Ch 4), 5700 Knob Rd, Nashville 37209, Irving Waugh, V. P. & Gen. Mgr.
*WDCN (Ch 2), P.O. Box 6188, Nashville 37212, Robert L. Shephard, Gen. Mgr.

TEXAS

KTXS-TV (Ch 12), Box 2997, Abilene 79604, A. R. Elam, Pres.
KRBC-TV (Ch 9), 4150 S. 14th St, Abilene 79602, Dale Ackers, Pres. & Gen. Mgr.
KFDA-TV (Ch 10), Cherry Ave at Broadway, Amarillo 79108, Bill Cook, V. P. & Gen. Mgr.
KGNC-TV (Ch 4), 2000 N. Polk St, Amarillo 79107, Bob Watson, Gen. Mgr.
KVII-TV (Ch 7), Box 925, Amarillo 79105, B. B. Baylor Jr, Gen. Mgr.
KHFI-TV (Ch 42), 908 West 19th St, Austin 78701, J. R. Kingsbery, Pres. & Gen. Mgr.
KTBC-TV (Ch 7), Box 1209, Austin 48767, J. C. Kellam, Pres. & Gen. Mgr.
*KLRN (Ch 9), P.O. Box 7158, University Station, Austin-San Antonio 78712, Robert F. Schenkkan, Gen. Mgr.
KDMT-TV (Ch 12), 1420 Calder Ave, Beaumont 77701, R. C. Currie Jr, V. P. & Gen. Mgr.
KFDM-TV (Ch6), Box 5566, Beaumont 77706, M. M. Johnson, Gen. Mgr.
KJAC-TV (Ch 4), Box 3257, Port Arthur 77642, Roy Shotts, V. P. & Gen. Mgr.
KWAB-TV (Ch 40), 2500 Kentucky Way, Big Spring 79720, Walter W. Windsor, Exec. V. P. & Gen. Mgr.
KIII-TV (Ch 3), 4750 Lexington Blvd, Corpus Christi 78411, M. D. McKinnon, Gen. Mgr.

KZTV-TV (Ch 10), Show Room Bldg, Corpus Christi 78403, Vann M. Kennedy, Pres. & Gen. Mgr.
KRIS-TV (Ch 6), 409 S. Staples St, Corpus Christi 78401, T. Frank Smith, Pres. & Gen. Mgr.
KRLD-TV (Ch 4), Herald Square, Dallas 75202, Ves Box, V. P. & Gen. Mgr.
WFAA-TV (Ch 8), Communications Center, Dallas 75202, Mike Shapiro, Gen. Mgr.
*KERA (Ch 15), 3000 HarryHines Blvd, Dallas 75201, Ray Huffer, St. Mgr.
KELP-TV (Ch 13), Box 9924, El Paso 79989, Gene Roth, Gen. Mgr.
KROD-TV (Ch 4), Box 1799, El Paso 79949, Sheldon Turner, Gen. Mgr.
KTSM-TV (Ch 9), 801 No. Oregon St, El Paso 79902, K. O. Wyler Sr, Pres. & Gen. Mgr.
WBAP-TV (Ch 5), 3900 Barnett St, Fort Worth 76103, Roy Bacus, Gen. Mgr.
KTVT (Ch 11), Box 2495, Ft. Worth 76101, James Terrell, St. Mgr.
KGBT-TV (Ch 4), 1519 West Harrison St, Harlingen 78550, McHenry T. Tichenor, Pres.
KPRC-TV (Ch 2), 3014 S. Post Oak Rd, Houston 77027, Jack Harris, Pres. & Gen. Mgr.
KTRK-TV (Ch 13), 3310 Bissonet, Houston 77005, W. E. Walbridge, Exec. V. P. & Gen. Mgr.
KHOU-TV (Ch 11), Box 11, Houston 77001, J. C. Richdale Jr, V. P. & Gen. Mgr.
*KUHT (Ch 8), 4513 Cullen Blvd, Houston 77004, Roy Barthold, St. Mgr.
KGNS-TV (Ch 8), Box 1378, Laredo 78040, Pat Miller, Gen. Mgr.
KCBD-TV (Ch 11), 5600 Avenue A, Lubbock 79404, Joseph H. Bryant, Pres.
KLBK-TV (Ch 13), Box 1559, Lubbock 79408, W. M. Windsor, Exec. V. P. & Gen. Mgr.
*KTXT (Ch 5), Box 4408, Tech Station, Lubbock 79409, D. M. McElroy, Dir. of Education.
KTRE-TV (Ch 9), Box 729, Lufkin 75901, Fred C. Hill, Pres. & Gen. Mgr.
KMID-TV (Ch 2), Midland 79705, Ray Herndon, Gen. Mgr.
KVKM-TV (Ch 9), Drawer K, Monahans 79756, J. Ross Rucker, Gen. Mgr.
KOSA-TV (Ch 7), 1211 N. Whitaker, Odessa 79761, John Vacca, V. P. & Gen. Mgr.
*KRET (Ch 23), 400 So. Greenville, Richardson, Thomas B. Hill, Dir.
KCTV (Ch 8), 1011 East 28th St, San Angelo 78205, Hal Atkins Jr, Gen. Mgr.
KENS-TV (Ch 5), Ave E & Fourth St, San Antonio 78205, Wayne Kearl, Gen. Mgr.
KONO-TV (Ch 12), 1408 N. St. Mary's St, San Antonio 78215, James Brown, V. P. & Gen. Mgr.
WOAI-TV (Ch 4), 1031 Navarro St, San Antonio 78205, E. V. Cheviot, V. P. & Gen. Mgr.
KXII-TV (Ch 12), Box 1175, Sherman 75090, C. H. Balding, Gen. Mgr.
KCEN-TV (Ch 6), 17 Third St, Temple 76501, Robert Lunquist, Gen. Mgr.
KLTV (Ch 7), Box 957, Tyler 75705, Marshall H. Pengra, Exec. V. P. & Gen. Mgr.
KWTV-TV (Ch 10), Waco 76710, M. N. Bostick, Pres. & Gen. Mgr.
KRGV-TV (Ch 5), 309 S. Missouri St, Weslaco 78596, Charles L. Brooks, Gen. Mgr.
KAUZ-TV (Ch 6), Seymour St, Wichita Falls, 76309, William E. Hobbs, Pres. & Gen. Mgr.
KFDX-TV (Ch 3), Box 2040, Wichita Falls 76307, Darrold Cannan, Pres.

UTAH

*KUSU (Ch 12), 745 North 12th East, Logan 84321, Burrell F. Hansen, Mgr. & Prgr. Dir.
*KOET (Ch 9), 1538 Gibson Ave, Ogden, Harold R. Hickman, Mgr.
*KWCS (Ch 18), 1122 Washington Blvd, Ogden 88404, Ben Van Shaar, Mgr. & Dir.
*KBYU (Ch 11), Brigham Young University, Provo, T. M. Williams, Dir. of Broadc. Services.
KCPX-TV (Ch 4), 130 Social Hall Ave, Salt Lake City 84111, Harold Woolery, Gen. Mgr.
KSL-TV (Ch 5), 145 Social Hall Ave, Salt Lake City 84111, L. H. Curtis, V. P. & Gen. Mgr.
KUTV (Ch 2), 179 Social Hall Ave, Salt Lake City 84111, Robert Temple, St. Mgr. & Gen. Mgr.
*KUED (Ch 7), 101 Music Hall, Salt Lake City 84112, Rex. L. Campbell, Dir.

VERMONT

WCAX-TV (Ch 3), 100 Market Square, Burlington 04501, Stuart Martin, Pres. & Gen. Mgr.

VIRGINIA

WSVA-TV (Ch 3), Rawley Pike, Harrisonburg 22801, J. Harry Abbott, Gen. Mgr.
WLVA-TV (Ch 13), 2320 Langhorne Rd, Lynchburg 24501, Thomas N. Waller, St. Mgr.
WTAR-TV (Ch 3), 720 Boush St, Norfolk 23510, Robert M. Lamb, Pres. & Gen. Mgr.
*WHRO (Ch 15), 5200 Hampton Blvd, Norfolk 23508, Randolph Brent, Gen. Mgr.
*WCVE (Ch 23), 1904 Old Farm Rd, Richmond, B. W. Spiller, Gen. Mgr.
WVEC-TV (Ch 13), 110 Third St, Norfolk 23510, Thomas Chrisman, Pres. & Gen. Mgr.
WAVY-TV (Ch 10), 801 Middle St, Portsmouth 23704, J. Glen Taylor, Pres. & Gen. Mgr.
WRVA-TV (Ch 12), 5710 Midlothian Pike, Richmond 23225, Barron Howard, V. P. & Gen. Mgr.
WTVR (Ch 6), Box 11064, Richmond, Walter A. Bowry, Jr, Gen. Mgr.
WXEX-TV (Ch 8), Box 8765, Richmond 23226, Thomas G. Tinsley Jr, Pres.
WDBJ-TV (Ch 7), Box 227, Roanoke 24002, John W. Harkrader, V. P. & Mgr.
WSLS-TV (Ch 10), Box 2161, Roanoke 24009, Horace Fitzpatrick, V. P. & Mgr.

WASHINGTON

KVOS-TV (Ch 12), 1151 Ellis St, Bellingham 98225, Andy Anderson, Dave Mintz, Pres.
*KWSC (Ch 10), Arts Hall, Washington State University, Pullman 99163, Robert A. Mott.
KING-TV (Ch 5), 320 Aurora Ave, Seattle 98109, Otto P. Brandt, Exec. V. P.
KIRO-TV (Ch 7), 1530 Queen Anne Ave. N, North, Seattle 98109, Lloyd E. Cooney, Exec. V. P. & Gen. Mgr.
KOMO-TV (Ch 4), 100 Fourth Ave North, Seattle 98109, W. W. Warren, Pres. & Gen. Mgr.
*KCTS (Ch 9), Drama-TV Bldg, University of Washington, Seattle 98105, Loren B. Stone, St. Mgr.
KHQ-TV (Ch 6), 4202 South Regal, Spokane 99203, R. O. Dunning, Pres. & Gen. Mgr.
KXLY-TV (Ch 4), 500 West Boone Ave, Spokane 99201, Wayne McNulty, Gen. Mgr.
KREM-TV (Ch 2), 4103 S. Regal, Spokane 99203, Alexander Hunter, St. Mgr.
KTNT-TV (Ch 11), S. 11th and Grant St, Tacoma 98405, Max H. Bice, Gen. Mgr.
KTVW-TV (Ch 13), 5544 No. 35th St, Tacoma 98407, James Agostino, Gen. Mgr.
*KPEC (Ch 56), 4400 Steilacoom Blvd, S. W. Tacoma 98499, J. Albert Brevik, Dir. of TV Education.
*KTPS (Ch 62), P.O. Box 1357, Tacoma 98401, Robert P. Singland, Dir. of TV Education.
KIMA-TV (Ch 29), Radio and TV Center, Yakima 98901, John H. Reber, V. P. & Gen. Mgr.
KNDO-TV (Ch 23), 23 S. First St, Yakima 98901, Hugh Davis, Pres.
*KYVE (Ch 47), 1105 South 15th Av, Yakima 98902, Dale Wile, Gen. Mgr.

WEST VIRGINIA

WHIS-TV (Ch 6), Municipal Bldg, Bluefield 24701, John C. Shott, Gen. Mgr.
WCHS-TV (Ch 8), 1111 Virginia St East, Charleston 25301, Philip D. Marella, Gen. Mgr.
WBOY-TV (Ch 12), 912 West Pike St, Clarksburg 26301, N.W. Levin, Pres.
WDTV-TV (Ch 5), 400 Quincy St, Fairmont 26554, J. Patrick Beacom, Pres. & Gen. Mgr.
WHTN-TV (Ch 13), 625 Fourth Ave, Huntington 25701, O. W. Myers, Exec. V. P. & Gen. Mgr.
WSAZ-TV (Ch 3), Box 2215, Huntington 25721, Jack W. Lee, V. P. & Gen. Mgr.
WOAY-TV (Ch 4), U.S. Highway 21 South, Oak Hill 25901, R. R. Thomas Jr, Pres. & Gen. Mgr.
WTAP-TV (Ch 15), 121 West Seventh St, Parkersburg 26101, Ron Maines, Gen. Mgr.
WTRF-TV (Ch 7), 1329 Market St, Wheeling 26003, Robert Ferguson, Exec. V. P. & Gen. Mgr.

WISCONSIN

WEAU-TV (Ch 13), 1907 S. Hastings Way, Eau Claire 54701, Leo Howard, Gen. Mgr.
WFRV-TV (Ch 5), 1181 East Mason St, Green Bay 54301, Lee Browning, V. P. & Gen. Mgr.
WBAY-TV (Ch 2), 115 S. Jefferson, Green Bay 54301, Haydn R. Evans, Gen. Mgr.
WLUK-TV (Ch 11), Box 711, Green Bay 54305, James Tomlin, Gen. Mgr.

WKBT-TV (Ch 8), 141 S. Sixth St, La Crosse 54601, Howard Dahl, Gen. Mgr.
WMTV-TV (Ch 15), Box 4269, Madison 53711, Thomas E. Bolger, Gen. Mgr.
WICS-TV (Ch 3), 4801 West Beltline Highway, Madison 53711, Ralph O'Connor, Gen. Mgr.
WKOW-TV (Ch 27), 5727 Tokay Blvd, Madison 53711, Tony Moe, Exec. V. P.
*WHA (Ch 21), 3313 University Av, Madison 53705, Steven Markstrom, Gen. Mgr.
WISN-TV (Ch 12), 759 N. 19th St, Milwaukee 53233, James T. Butler, V. P. & Gen. Mgr.
WITI-TV (Ch 6), 5445 N. 27th St, Milwaukee 53209, Roger LeGrand, V. P. & Gen. Mgr
WTMJ-TV (Ch 4), 720 East Capitol Dr, Milwaukee 53212, George Comte, V. P. & Gen. Mgr.
WVTV (Ch 18), Schroeder Hotel, Milwaukee 53203, Lawrence M. Turet, Exec. V. P.
*WMVS (Ch 10), 1015 No. Sixth St, Milwaukee 53203, Otto F. Schlaak, St. Mgr.
*WMTV (Ch 36), 1015 No. Sixth St, Milwaukee 53203, Otto F. Schlaak, St. Mgr.
WAOW-TV (Ch 9), Box 1007, Wausau 54401, Robert Johnson, Gen. Mgr.
WSAU-TV (Ch 7), 714 Fifth St, Wausau 54401, Richard D. Dudley, Pres. & Gen. Mgr.

WYOMING

KTWO-TV (Ch 2), 4200 East Second St, Casper 82601, Jack Rosenthal, V. P. & Gen. Mgr.
KFBC-TV (Ch 5), 2923 East Lincolnway, Cheyenne 82001, William C. Grove, Exec. V. P. & Gen. Mgr.
KWRB-TV (Ch 10), 500 Broadway, Thermopolis 82443, Miss Mildred Ernst, Mgr.

AMERICAN BROADCASTING COMPANIES, INC.

Addr: 1330 Avenue of the Americas, New York, New York 10019. **L.P:** Pres: Leonard H. Goldenson. Exec. Vice Pres: Simon B. Siegel. Vice Pres. Press Information: Ellis Moore. Vice Pres. & Asst. to Exec. Vice Pres: Alfred Schneider. **L.P:** for ABC Television Network: Pres: Thomas W. Moore. Vice Pres. in charge of Public Relations & Planning: Edward Bleier. Vice Pres. Programming: Leonard Goldberg. Vice Pres, charge of broadcast operations and engineering: Julius Barnathan. **L.P:** for ABC International Television, Inc: Pres: Donald Coyle.
Owned and operated stations: WABC-TV, New York; WBKB, Chicago; WXYZ-TV, Detroit; KABC-TV, Los Angeles; KGO-TV, San Francisco.

COLUMBIA BROADCASTING SYSTEM, INC.

Addr: 51 West 52nd Street, New York, New York 10019.
L.P: Chairman of Board: William S. Paley. Pres: Frank Stanton. John A. Schneider, Group V.P. **L.P:** for CBS Television Network: Pres: John T. Reynolds. Sr Vice Pres. Thomas H. Dawson, Vice Pres. Information Services: John P. Cowden. Sr Vice Pres. Programs: Michael Dann. **L.P:** for CBS Television Stations Division: Pres: Merle Jones. Exec. Vice Pres, International Operations: Frank J. Shakespeare. **L.P:** for CBS Films, Inc: Admin. Vice Pres: Sam Cook Digges. Vice Pres. International Sales: Ralph M. Baruch.
Owned and operated stations: WCBS-TV, New York; WBBM-TV, Chicago; KNXT, Los Angeles; WCAU-TV, Philadelphia; KMOX-TV, St. Louis.

NATIONAL BROADCASTING COMPANY

Addr: 30 Rockefeller Plaza, New York, New York 10020.
L.P: Chairman of Board: Walter Scott. Pres: Julian Goodman. Sr. Exec. Vice Pres: David C. Adams, Vice Pres. Corporate Information: Robert Kasmire. **L.P:** NBC Television Network: Pres: Donald Durgin. Vice Pres. Program: Mort Werner. **L.P:** for NBC Enterprises Division: Pres: George A. Graham, Jr. Dir: Gerald Adler.
Owned and operated stations: WNBC-TV, New York; WRC-TV, Washington; WMAQ-TV, Chicago; WKYC-TV, Cleveland; KNBC-TV, Los Angeles.
TV Homes: 54.900.000,–.

SPECIAL OFFER TO SEAMEN

One copy of the WRTH is scarcely enough for your ship's library. Special discount available for orders exceeding two copies. Write for further details to
WORLD RADIO TV HANDBOOK CO. LTD.
Sundvej 6, Hellerup, Denmark.

THE ARMED FORCES RADIO & TELEVISION SERVICE

A: Army, AF: Air Force, N: Navy.

AREAS		chA	Watts/ kW	AREAS		chA	Watts/ kW
Adak[1]	N	8	120	Misawa[8]	AF	73	600
Campion[1]	AF	8	130	Pusan[9]	A	2	120
Fo. Greely[1]	A	8	180	Seoul[9]	A	2	5kW
King Salmon[1]	AF	8	100	+ 6 relay st's.			
Kodiak[1]	N	8	200	Clark AB[10]	AF	8	80
Northeast Cape[1]	AF	11	50	Okinawa[11]	AF	8	45kW
Goose Bay[2]	AF	8	346	Asmara[12]	A	2	250
Fo. Clayton[3]	A	8	250	Teheran[13]	A	8	500
Fo. Davis[3]	A	10	250	Tripoli[14]	AF	8	500
Guantanamo[4]	N	8	1kW	Terceira[15]	AF	8	180
Aguadilla[5]	AF	21	100	Sondrestrom[16]	AF	8	180
Roosevelt Roads[6]	N	8	10	Thule[16]	AF	8	100
				Keflavik[17]	N	8	250
Iraklion[6]	AF	8	300	Johnston Isl.[18]	AF	7	200
Ramstein[7]	AF	26	1kW	Midway Isl.[18]	N	4	120
Spangdahlem[7]	AF	22	1kW	Saigon[19]	A	11*	2kW
Chitose[8]	AF	73	1kW	*=Airborne Studio.			

[1] Alaska; [2] Labrador; [3] Canal Zone; [4] Cuba; [5] Puerto Rico; [6] Greece; [7] Germany; [8] Japan; [9] Korea; [10] Philippines; [11] Okinawa; [12] Eritrea; [13] Iran; [14] Libya; [15] Azores; [16] Greenland; [17] Iceland; [18] Pacific; [19] Vietnam.

CENTRAL AMERICA

BARBADOS

CARIBBEAN BROADCASTING CORPORATION (Gov, Comm.)

Addr: P.O. Box 780, Barbados. **Te:** 92041. **Cable:** Cabroco – **L.P:** see radio – **Station** (System: Can. Gen. Electric): CBC-TV chA3 60/30kW H – **D.Prgr:** 21.30–02:30 – **Fi:** By adv. and licence fee – **Ad:** 8 min's per h. – **TV sets:** 9.000.

COSTA RICA

TELEVISORA DE COSTA RICA (Comm.)

Addr: Apt. 3876, San José. **Te:** 222233. **Cable:** Television. **L.P:** Dir: H. Federspiel F. Dir. Tec: R. Carrillo Lara. **Station:** TI-TVCR chA7 50/25kW. **Rel. st's:** Villa Mills chA11 3.5/1.75kW, Palmira chA12 5.4/2.7kW, Turrialba Volcano chA7 1.5/0.75kW, Golfito chA5 1.2/0.6kW. **D.Prgr:** 18.00–04.00.

R. TELEVISION TIC-TAC (Comm.)

Addr: Apt 4666, San José. **Te:** 3283. **Cable:** Tictac. **L.P:** Gen. Mgr: A. Vargas V. St. Mgr: C. Reyes A. **Station:** San José chA4 75/37.5 kW H. **D.Prgr:** 21.00–05.00.

CORP. COSTARRICENSE DE TELEVISION (Comm.)

Addr: P.O. Box 2860, San José. **Te:** 3789. **L.P:** Pres. & Film Buyer: M. Sotela P. Gen. Mgr: C. Alfaro. Dir. Tec: A. Mora. **Station:** chA6 12/6kW **D.Prgr:** 18.00–04.00.

TELESISTEMA NACIONAL S.R.L.

Addr: Apt. 231, Alajuela City. **Cable:** Telenac. **L.P:** Gen. Mgr: C. M. Reyes. Dir. Tec: C. M. Reyes Z. Film Buyer: R. Fernandez S. **Stations:** chA2 60/30kW H (repeater chA8 6/3kW). **D.Prgr:** 00.00–04.00. **TV sets:** 65.000.

CUBA

TELEVISION STATIONS: Pol: H. Call: CM-.

Call	ch	kW	Location	Call	ch	kW	Location
KU-TV	2	14/7	Santiago**	LD-TV	8	5/2.5	Holguin*
H-TV	3	31/15.5	Sta Clara*	RA-TV	8		Sta Clara*
KJ-TV	3	27.5/13.25	Holguin*	GQ-TV	9	3/1.5	Matanzas**
BF-TV	4	125/62.5	Havana*				
J-TV	4	18/9	Camaguey*	GH-TV	11	5/2.5	Matanzas*
HQ-TV	5	25.6	Sta Clara**				
LB-TV	5	5/2.5	Santiago*	–	12	61/30.5	P. del Rio**
JL-TV	6	56.2/28	Camaguey*				
Q-TV	6	125/62.5	Havana**	LF-TV	13	5/2.5	V. de las Tunas*
–	7	–	S. Cristobal**	G-TV	13	5/2.5	Matanzas*
FD-TV	7	18.5/9.25	C. de Avila**				

***Television Revolucion:** **Addr:** Mazon y San Miguel, Habana – ****CMQ-TV:** **Addr:** Radiocentro, Habana – **D.Prgr:** W 16.30–04.00 – Both netw's operated by the Gov – **TV sets:** 555.000.

DOMINICAN REPUBLIC

RADIO SANTO DOMINGO-TV (Comm.)
Addr: Calle Dr. Tejada Florentine 8, Santo Domingo. **Te:** 2-3195. **Cable:** Dominican – **L.P:** Dir. Gen: Dr. L. D. Pablo – **Station:** HISD-TV chA4 5/2.5kW – **Satellites:** La Cumbre chA9 0.5/0.25kW, Santo Cerro chA2 5/0.25kW – **D.Prgr:** 21.00–03.30.

RAHINTEL TELEVISION (Comm.)
Addr: Centro de los Heroes de Constanza, Sto. Domingo. **Te:** 3-1031. **Cable:** Rahin – **L.P:** Dir. Gen: H. Perez.
Station: chA7 (Sto. Domingo) 1/0.5kWH, Santiago chA11 0.5kW (satellite); relay st. (UHF) in La Naviza mountain – **D.Prgr:** 22.25–02.30. – **TV sets:** 25.000.

EL SALVADOR

TELERADIO CENTROAMERICANA (Comm.)
Addr: Apt. 1375, San Salvador. **Te:** 1054 – **L.P:** Gen. Mgr: A. Vilar. Dir. Tec: R. H. Rahn. Film Buyer: A. Vesquez – **Stations:** YSU-TV chA4 75/37.5kW, YSEB-TV chA6 9/4.5kW, YSDR-TV chA8 20/10kW. **D.Prgr:** chA4: 17.00–06.00; chA6 23.00–05.00 – **TV-sets:** 35.000.

GUADELOUPE

OFFICE DE RADIODIFF. TELEVISION FRANÇAISE
Addr: Basse Terre – **L.P:** see Radio.
Station (System K 625 lines): Pointe à Pitre 207.25/213.75Mc 0.05kW H, Basse Terre 183.25/189.75Mc 6W H. **D.Prgr:** 22.00–01.00.
TV-sets: 2417 – **ALF:** 100 Frcs.

GUATEMALA

TELEVISION NACIONAL (Gov.) – **Addr:** Ca. 18 de Septiembre 6-72, Z-1, Guatemala City – **L.P:** see radio.
Station: TGW-TV chA5 10/5kW H – **D.Prgr:** 00.00–04.00; chA9 5/2.5kW H (Cult prgr's).

RADIO-TELEVISION GUATEMALA S. A. (Comm.) – **Addr:** Apt. 1367, Guatemala. **Te:** 42491. **Cable:** Teletenango – **L.P:** Gen. Mgr. & Film Buyer: W. G. Campbell. Dir. Tec: F. Licht – **Station:** TG-BOL-TV chA3 100/25kW H – **D.Prgr:** 17.00–06.00.

TELEVICENTRO (Comm.) – **Addr:** 7a Av. 1-19, Z-9, Guatemala – **Station:** TGTV chA7 5/2.5kW H – **D.Prgr:** 01.00–05.00 – **TV-sets:** 60.000.

HAITI

TELE-HAITI (Comm.) – **Addr:** P.O. Box 1126, Port-au-Prince **Te:** 2278. **Cable:** Telehaiti – **L.P:** Dir. Gen: A. S. Apaid. Dir. Tec: E. C. Gentil – **Station:** 4VMR-TV chA5 2.5/0.6kW H – **D.Prgr:** W 17.00–02.30, Sun 17.00–23.00 – **TV sets:** 10.000.

HONDURAS (Rep.)

COMPAÑIA TELEVISORA HONDUREÑA S. A. (Comm.)
Addr: Apt. Postal 734, Tegucigalpa. **Te:** 2-5514. **Cable:** Television – **L.P:** Dir. Gen: J. R. Ferrari. Dir. Tec: M. Villeda T – **Station:** HRTG-TV chA5 4/2kW V – **Rel st's:** HRSU-TV chA9 20kW (El Socorro), HRYA-TV chA13 7kW (San Pedro Sula) – **D.Prgr:** 17.00–20.00, 23.00–05.00 – **TV-sets:** 15.000.

JAMAICA

JAMAICA BROADCASTING CORPORATION (Comm.)
Addr: 5 South Odeon Ave, Kingston – **L.P:** see radio – **Stations:** (Systems: Can. Gen. Electric, Selenia, Italy): Kingston chA11 0.28/0.14kW H – **Relay st's** (Pol: H): Coopers Hill chA 7 20.5/10.25kW, Port Antonio chA8 0.16/0.8kW, Montego Bay chA11 1/0.5kW, Oracabessa chA12 1/0.5kW, Spur-Tree chA13 23/21.5kW, Yallahs chA9 1/0.5kW – **D.Prgr:** W 22.30–03.00, Sun 21.00–03.00.
TV sets: 40.000.

LEEWARD ISLANDS

LEEWARD ISLAND TELEVISION SERVICES LTD.
(Comm, Gov, participation) – **Addr:** Belmont Hill, P.O. Box 159, St. John's, Antigua – **L.P:** Dir. Gen: W. Staskow. St. Mgr: D. Seath. Dir. Tec: S. James.
Stations: ZAL chA10 22kW H – Relay st: chA7 0.1kW H – **D.Prgr:** 22.30–02.00. Tests: 21.30–22.30 – **TV-sets:** 2.000.

MARTINIQUE

OFFICE DE RADIODIFF. TELEVISION FRANÇAISE
Addr: Fort de France – **L.P:** see radio – **Station** (System K 625 lines): 175.25/181.75Mc 0.05kW. **D.Prgr:** 23.00–02.00. **TV-sets:** 2914.
ALF: 100 Frcs.

MEXICO

*=affiliated to Telesistema Mexicano – All st's comm. exc. XEIP.

INSTITUTO POLITECNICO NACIONAL (Cult): **Addr:** Casco de Sante Tomas, México DC. **Station:** XEIP–TV chA11 5kW.

TELEVISION DE LA FRONTERA S.A: **Addr:** Vicente Guerrero 704, Ci Juarez, Chih. **Station:** XEJ-TV chA5 3.65/1.82kW H.

* **TELEVISORA MEXICALI S.A:** **Addr:** P.O.Box 1356, Mexicali, B.C. **Te:** 2-28-55. **L.P:** Dir. Gen: R. Sánchez de Aparicio. Dir. Tec: E. Bezies. **Station:** XHBC-TV chA3 15/7.5kW V. **D.Prgr:** 22.00–07.00.

TELESISTEMA MEXICANO S.A: **Addr:** Edif. Televicentro, Av. Chapultepec 18, México. D.F. **Te:** 18-50-20. **L.P:** Pres: E. Azcárraga. St. Mgr: 1st Netw: E. Azcárraga Jr. Mgr. 2nd Netw: R. O. Farril. Mgr. 3rd Netw: Dir. Tec: A. Chaveste. Sales Mgr: E. Barrientos. Dir. Press & Promotion: V. H. O'Farill A. **Stations:** 1) XEW-TV chA2 100kW H (Mexico City). **Relay st's:** XEQ-TV chA9 325kW H (Altzomoni) – XEZ-TV chA3 10kW (Cerro del Zamorano) – XEWO-TV chA2 5/2.5kW (Guadalajara) – 2) XH-TV chA4 100kW H (México City). **Rel. st's:** XEX-TV chA7 5kW (Paso de Cortés) chA6 10kW H (Cerro del Zamorsno) – 3) XHGC-TV chA5 5kW H (México City) – 4) KWEX-TV chA41 (San Antonio, Texas, USA), KMEX-TV chA34 (Los Angeles, Calif). **D.Prgr:** 1) D 13.30–06.30. 2) D 17.00–06.30. 3) D 22.00–06.30.

TELEVISION DEL NORTE S.A: **Addr:** P.O. Box 1833, Monterrey, NL. **Te:** 26120. **L.P:** Dir. Gen: V. Flaquer. Dir. Tec: R. Rueda. Film Buyer: A. Roque. **Station:** XET-TV chA6 84/42kW H. **D.Prgr:** 16.00–06.30.

TELEVISION INDEPENDIENTE DE MEXICO S.A: **Addr:** P.O. Box 1833, Monterrey N.L. **L.P:** Dir. Gen: A. Flores Ysita. Dir. Tec: R. Rueda. Film Buyer: A. Roque. **Stations:** XET-TV chA6 84kW, XHFM-TV chA2 100kW, XHP-TV chA3 6kW, XEKW-TV chA10 6kW.

TELEVISION DE PUEBLA S.A: **Addr:** Teziutlán 34, Col. La Paz, Puebla, Pue. **L.P:** Dir. Gen: C. Ferraez M. Dir. Tec: L. López. Film Buyer: C. Adane. **Station:** XHP-TV chA3 6kW. **D.Prgr:** 22.00–06.00.

TELEVISION DE MICHOACAN S.A: **Addr:** Lejarza 90, Morelia, Mich. **L.P:** Dir. Gen: J. Martinez. **Station:** XEKW-TV chA10 6kW. **D.Prgr:** 22.00–06.00.

RADIO TELEVISION S.A: **Addr:** Apt. Postal 121, Tijuana, B.C. **L.P:** Dir. Gen: F. Fernandez. Dir. Tec: Ing. A. Frias Ramirez. **Station:** XE-TV chA6 100/50kW H. **D.Prgr:** 15.00–07.00 (incl. color tv).

* **TELEVICENTRO DE MONTERREY:** **Addr:** Espinosa 780 Pte, Monterrey, N.L. **Te:** 3-62-75. **L.P:** Gen. Mgr: M. Quintanilla G. Film Buyer: G. Adalid G. Dir. Tec: J. Garcia. **Stations:** XEFB-TV chA3 5/2.5kW H. **D.Prgr:** 18.00–06.00. XHX-TV chA10 5/2.5kW. **D. Prgr's:** 18.00–06.00.

* **TELEVISION DE NUEVO LAREDO:** **Addr:** Aldama 2611, Nuevo Laredo, Tams. **Te:** 2182. **L.P:** Gen. Mgr: R. Tijerina C. **Station:** XEFE-TV chA2 0.5kW – chA11 1.5/0.75kW H. **D.Prgr:** 00.00–06.00.

TELEVISION TAPATIA S.A: **Addr:** P.O. Box 5, Guadalajara, Jal. **Te:** 37525. **L.P:** Gen. Mgr: M. Bauche. Dir. Tec: Ing. C. Sánchez. Film Buyer: E. Meludis C. **Station:** XEHL-TV chA6 6/3kW H. **D.Prgr:** 21.00–06.00.

* **TELEVISORA DE LA LAGUNA:** **Addr:** Torreon, Coah. **Station:** XELN-TV chA4 4/2kW H.

TELEVISION DE CIUDAD JUAREZ: **Addr:** P.O. Box 271, Ci. Juarez, Chih. **L.P:** Gen. Mgr: S. R. Molinar F. **Station:** XEPM-TV chA2 10/5kW H.

* **TELEVISORA DE CHIHUAHUA S.A:** **Addr:** Chihuahua, Chih. **Station:** XHFI-TV chA5 0.4/0.2kW H.

* **TELEVISORA DE HERMOSILLO S.A:** **Addr:** P.O. Box 606, Hermosillo, Son. **Te:** 38855. **L.P:** St. Mgr: A. Casanova L. Dir. Tec: E. Alvarez. Dir. Prgr: G. S. Madrid. **Station:** XEVH-TV chA6 1.6/0.8kW H. **D.Prgr:** 22.00–06.00.

***TELEVISORA DE OCCIDENTE S.A:** Addr: Av. Alemania 285, Guadalajara, Jal. Te: 4-41-40. L.P: Dir. Gen: M. Rincon E. Gen. Mgr: M. de Coso Y. Dir. Tec: R. Venegas. Stations: XEWO-TV chA2 5/2.5kW H, XHG-TV chA4 5/2.5 kW. D.Prgr: XEWO-TV: As Telesistema Mexicano 1st Netw. XHG-TV: 18.00–07.00.

*** TELEVISORA DE CALIMEX S.A:** Addr: Tijuana B.C. Station: XEWT-TV chA12 66/33kW H.

*** TELEVISORA DE NOGALES S.A:** Addr: Av. Alvaro Obregón 138, Nogales, Son. Te: 562. L.P: Gen. Mgr: Dr. F. Arriola G. Dir. Tec: Ing. C. P. Morreale. Station: XHFA-TV chA2 8/4kW. D.Prgr: 00.00–07.00.

TELEVISORA DE YUCATAN: Addr: Ca. 60, No. 385, Merida, Yucatan. L.P: Dir. Gen: A. Garcia Lavin. Film Buyer: F. Leon M. Dir. Tec: H. Padran M. Station: XHY-TV chA3 5/1kW H. D.Prgr: 22.00–06.00.

TELEVISION DE COLIMA S.A: Addr: Anillo Circunvalación 1080 Nte, Colima, Col. Station: XHCC-TV chA5 1/0.5kW.

*** TELEVISION DE VERACRUZ:** Addr: Apt. Postal 751, Veracruz. L.P: Dir. Gen: C. Ferraez Matos. Dir. Tec: C. Trejo Castillo. Film Buyer: J. Horacio S. Station: XHFM-TV chA2 20/10kW. D.Prgr: 23.00–06.00.

TELEVISION DE ENSENADA: Addr: Av. Punta Banda y Eugenia, Fraccionamiento Chapultepec, Ensenada, B.C. Station: XHS-TV chA23 0.4/0.2kW.

UNIVERSIDAD DE SONORA: Addr: Hermosillo. Station: XHUS-TV chA1 1/0.14kW H.

TELEVISORA DEL YAQUI: Addr: 5de Febrero 8, Ci. Obregon, Son. Station: XHI-TV chA2 25/12.5kW H.

JESUS D. GONZALEZ: Addr: Paricutin 316, Sur, Col Roma, Monterrey, N. L. Station: XHDG-TV chA12.

TELEVISION MEXICANA INDEPENDIENTE: Addr: Av. Insurgentes Sur 1870, Mexico D.F. Station: chA13.

ROBERTO NAJERA – Station: chA16, Mexico, D.F.

NETHERLANDS ANTILLES

TELECURACAO (Comm.)
Addr: P.O. Box 415, Curaçao. Te: 13140. Cable: Telecuracao. L.P: Pres: G. A. Bartell. Gen. Mgr. & Film Buyer: E. C. Hernandez. Asst. Gen. Mgr: J. Lashley. Chief Eng: P. J. Hoogesteger. Station: chE8 2kW H – D.Prgr: 20.30–04.00 – TV sets: 17.000.

TELEARUBA (Comm.)
Addr: P.O. Box 392 1A, Aruba. Te: 7302. Cable: Telearuba. L.P: See Telecuraçao – Station: Ch E12 3kW – D.Prgr: 22.00–04.00. Projected St's: 2 low powered repeaters at Bonaire.

NICARAGUA

TELEVISION DE NICARAGUA S. A. (Comm.)
Addr: Apt. 1505, Managua. Te: 5404. Cable: Tevenic – L.P: St. Mgr: R. O. Caño. Dir. Tec: Ing. F. Cruz R. Film Buyer: R. A. Silva. Stations: chA6 6/2kW H, chA8 0.3/0.15kW H – D.Prgr: 18.00–20.00, 23.00–05.00 – TV sets: 19.000.

TELEVICENTRO DE NICARAGUA (Comm.)
Addr: Las Nubes, El Crucero, Managua – Station: YNTC chA2 5/1kW

TELEVISORA CONTINENTAL (Comm.)
Addr: Del Cine Ruiz 2 1/2 c. abajo, Managua – L.P: St. Mgr: Dr. M. Valle Q – Station: YNTM-TV chA3 0.1/0.05kW.

TELEVISION COMERCIAL (Comm.)
Addr: Las Nubes, El Crucero, Managua – Station: YNLG-TV chA12 0.5/0.25kW. – TV sets: 1.850.000.

PANAMA

CIRCUITO RPC-TELEVISION (Comm.) – Addr: Apt. 1795, Panama. L.P: Pres: F. Eleta A. Gen. Mgr & Film Buyer: A. Diaz Wong.
Stations: HOHM-TV chA4 45/22.5kW, HOH4-TV David chA6 6.3/3.1kW H, HOF34-TV Sona chA7 7.95/3.97kW, HOHN-TV chA12 25/12.5kW (rel. chA4). D.Prgr: 16.30–18.15, 21.00–04.30.

TELEVISORA NACIONAL S.A. (Priv. Comm.) – Addr: Apt. 8371, Panama. Te: 3-1724. Cable: Tenasa. Stations: HOU34-TV chA2 90/45kW, HP5C-TV El Valle chA6 0.5/0.25kW. D.Prgr: 16.30–05.00.

TELEBARU S.A. (Comm.) – Addr: P.O. Box 160, David. L.P: St. Mgr: R. Samudio. Station: chA10 5/25kW. – TV sets: 70.000.

PUERTO RICO

STATIONS: All comm.exc. 2) and 5).

	Call	chA	kW		Call	chA	kW
1)	WKAQ-TV	2	100/50	6)	WRIK-TV	7	63.1/31.6
2)	WIPM-TV	3	35.5/17.8	7)	WSUR-TV	9	2.73/0.41
3)	WAPA-TV	4	56.2/33.9	8)	WKBM-TV	11	27/13.5
4)	WORA-TV	5	100/50	9)	WOLE-TV	12	17.88/8.91
5)	WIPR-TV	6	100/50				

1) El Mundo Inc, Box 5096, San Juan. L.P: Gen. Mgr: R. Ruiz. – 2) Dept. of Education, Box 449, Mayaguez. L.P: Gen. Mgr: J. Delano. 3) WAPA TV Broadc. Corpo, Box 2050, San Juan. L.P: Gen. Mgr: H. Modestti – 4) Quality Telecasting Corpo, Box 43, Mayaguez. L.P: Mgr: R. M. Dupont – 5) Dept. of Education, Box 909, Hato Rey. 6) Ponce TV Corpo, Darlington Bldg. Ponce. L.P: Gen.Mgr: R. Royo, Jr – 7) WSUR-TV, Box 471, Ponce. L.P: Pres. & Gen.Mgr: R. Perez Perry – 8) WKBM-TV, Box 4189, San Juan. L.P: see 7) – 9) Western Broadc. Corpo of Puerto Rico, Box 2050, San Juan. L.P: Gen. Mgr: C. Rivera.
Projected: WTSJ-TV chA36 50/20kW. – TV Homes: 400.000.

TRINIDAD & TOBAGO

TRINIDAD AND TOBAGO TELEVISION CO. LTD.
Addr: Television House, Maraval Rd, Port-of-Spain. Te: 24141. Cable: Television Trinidad. L.P: Gen. Mgr: F. A. Rawlins. Chief Eng: C. D. Parris. Sales Mgr: M. Telfer. Station: (System: Can. Gen. Electric): chA13 15/6kW H. Relay st: chA2 15/7.5kW H. D.Prgr: W 22.00–02.00(Sat 03.00), Sun 21.00–03.00. Fi: A joint priv. enterprise between majority joint share-holders, Rediff. Ltd. and Scottish TV Ltd, with participation by C.B.C. & Gov – TV sets: 35.000.

VIRGIN ISLANDS (American)

ISLAND TELERADIO SERVICE, INC. (Comm.)
Addr: P.O. Box 1947, St. Thomas – L.P: see radio.
Station (System: Gates): chA10 2.5/1.25kW – D.Prgr: 20.00(Sun 19.30)–03.30 – TV sets: 8.500.

SOUTH AMERICA

ARGENTINA

STATIONS: 4) Gov, non-comm st; 5) Gov, comm st; Other Private, Commercial stations.

	Call	chA	kW(ERP)		Call	chA	kW(ERP)
1)	LS86	2	100/50	14)	LU80	9	45/22.5
2)	LT83	3	90/45	15)	LU83	9	120/60
3)	LT84	5	120/60	16)	LV83	9	50/25
4)	LV84	6	0.12/0.06	17)	LU82	10	5/2.5
5)	LS82	7	42/21	18)	LV80	10	0.35/0.175
6)	LU81	7	60/30	19)	LW83	10	0.5/0.125
7)	LU84	7	120/60	20)	LS84	11	120/60
8)	LV89	7	2/1	21)	LW82	11	10/5
9)	LW80	7	5/2.5	22)	LV81	12	50/25
10)	LW81	7	4/2	23)	LS85	13	116/58
11)	LU86	8	80/40	24)	LT80	13	6/3
12)	LV82	8	5/2.5	25)	LT82	13	95/47.5
13)	LS83	9	120/60				

1) La Plata. L.P: Dir. J. Fernandez C. D.Prgr: 21.00–04.30.
2) Av. Caseros 8101, Rosario. Te: 48997. L.P: Dir. G. Stazza. D.Prgr: 16.30–04.30.
3) Av. Belgrano 1055, Rosario. Te: 25894. L.P: Dir. O.L. Massa. D.Prgr: 17.00–04.30.
4) Luzuriaga 360, San Rafael. Te: 2454. L.P: Dir. A. Espasandin.
5) Primera Televisora Argentina, Av. Leandro N. Alem 735, Buenos Aires. Te: 32-7091. L.P: Dir. R.A. Parola. D.Prgr: 16.00–04.00 (Relay st's in Rosario, Sant Fé & Chivilcoy).
6) Blandengues 225, Bahia Blanca. Te: 29530. L.P: Dir. J. Sieli. D.Prgr: 22.00–04.00.
7) Ruta 22 s/n, Neuquén. Te: 2271. L.P: Dir. A.J. Sánchez. D.Prgr: 23.30–04.30.
8) Difusora Mendoza, Garibaldi 70, Mendoza. Te: 19273. L.P: Dir. & Film Buyer: H. Bartolomedi. D.Prgr: 13.00–05.00.
9) R. Vision Jujuy S.A, Av. 19 de Abril 749, San Salvador de Jujuy. L.P: Dir. Gen: S. Grinman. Dir. Tec: R. Francisco E. D.Prgr: 23.00–03.30.
10) Pellegrini 345, Santiago del Estero. Te: 3333. L. P: Dir. A. Alvarez V.

11) **Difusora Marplatense**, Av. Luro 2907, Mar del Plata. Te: 23046. L.P: Dir. Gen: L. Heker. Mgr. & Film Buyer: O. Viña. Dir. Tec: J.A. Suarez. D.Prgr: 14.45–05.30.
12) Rivadavia 22 Este, San Juan. Te: 7174. L.P: Dir. J.E. Estornell. Dir. Tec: J. Z. Neman. Film Buyer: M. Valenti. D.Prgr: 23.00–05.00.
13) **Comp. Argentina de TV**, Castex 3345, Buenos Aires. Te: 72-3075. L.P: Dir. A. Romay. D.Prgr: 14.00–05.30.
14) Sarmiento 60, Bahia Blanca. Te: 20201. L.P: Dir. D.J. de Massot. D.Prgr: 21.00–04.30.
15) Rawson 1459, Comodoro Rivadavia. Te: 2079. L.P: Dir. J.L. Pastorini. D.Prgr: 16.30–04.00.
16) San Martin 1027, Mendoza. Te: 14253. L.P: Dir: F. Alvarez H. D.Prgr: 16.30–04.30.
17) Independencia 1163, Mar del Plata. Te: 41003. L.P: Dir: V.C. Madariaga. D.Prgr: 19.30(Sat 16.00)–04.30.
18) **Universidad Nacional de Córdoba**, Rivera Indarte 170, Córdoba. Te: 31986. L.P: J.R. Caminotti. Dir. Tec: H.P. Blesio. Film Buyer: A.H.Rustan. D.Prgr: 16.00–04.00.
19) **Televisora de la Universidad Nacional Tucumán**, Av. 9 de Julio 629, Tucumán. Te: 20426. L.P: Dir. Gen: J. Guillermo L. D.Prgr: 22.00–02.00.
20) **Teleonce Dicon**, Pavón 2444, Buenos Aires. Te: 91-9232. L.P: Dir: P. Simoncini. Dir. Tec: C.A. Fernandez. D.Prgr: 17.30–05.00.
21) España 465, Salta. Te: 17960. L.P: Dir. F.U. Michel.
22) **Telecor S.A**, San Martin 70, Córdoba. Te: 96081. L.P: Dir: M. Peña. Dir. Tec: P. Chialvo. Film Buyer: J.L. Romero V. D.Prgr: 13.30–05.00.
23) **Rio de la Plata TV**, Cochabamba 1153, Buenos Aires. Te: 27-3601. L.P: A.R. Constantini. D.Prgr: 12.30–04.30 (Sun 14.30–04.15).
24) Calle Canal 13, no. 13, Corrientes. Te: 3179. L.P: Dir: C.B.Smith.
25) Grand Bourg y Boulevard Galvez, Santa Fé. Te: 29959. L.P: Dir: M.V. Bobbio – TV sets: 1.700.000.

BRAZIL

ASSOCIAÇÃO BRASILEIRA DE EMISSORAS DE RADIO & TELEVISÃO (ABERT): Addr: Av. Rio Branco 4, salas 901-903, Rio de Janeiro. L.P: see radio.

DIARIOS E EMISSORAS ASSOCIADOS: Addr: Rua S. Cabral 103, Rio de Janeiro. L.P: see radio.
All st's comm. exc. where indicated.

1) **TELEVISÃO NACIONAL DE BRASILIA** (Gov.): Addr: C.P. 95, Brasilia. Station: chA3 2/1kW H.

2) **TELEVISÃO BRASILIA**: Addr: Av. W3, Setor de Rádio e Televisão, Brasilia, D.F. Te: 2-9666. Telex: 157. L.P: Dir. Gen: Dr. J. Valladares. St. Mgr: A. Sá. Dir. Tec: R. Perez. Station: chA6 10/5kW H. D.Prgr: 20.15(Sat 18.10, Sun 17.00)–03.00.

3) **TELEVISÃO ALVORADA**: Addr: Brasilia. Station: chA8 10/5kW H. D.Prgr: 15.00(Sat/Sun 14.00)–03.00.

4) **TELEVISÃO CONTINENTAL**: Addr: Rua das Laranjeiras 291, Rio de Janeiro. Te: 42-6419. L.P: Dir. Gen: C. Berardo. St.Mgr: C.B. Carneiro da Cunha. Dir. Tec: J.M. Franciscus Zayen. Station: chA9 10/5kW H. D.Prgr: 21.00–04.00.

5) **TELEVISÃO-RIO**: Addr: Av. Atlantica 4264, Rio de Janeiro. Te: 27.0047. Cable: Teverio. L.P: Mgr: J. Baptista do Amaral Jr. Dir. Tec: J. Toropovsky. Dir. Prgr: J.O. Castro N. Film Buyer: W.C. Bueno. Station: chA13 36/18kW H. D.Prgr: 15.00(Sat/Sun 14.00)–03.00. Relay St's: TV-Juiz de Fora, MG, chA5 10/5kW H, TV-Lafaiete chA6 10/5kW H, TV-Guaratingueta chA12 10/5kW H, TV-Friburgo chA3 10/5kW H.

6) **TELEVISÃO-TUPI**: Addr: Av. João Luiz Alves 13/14-Urca, Rio de Janeiro, GB. L.P: Dir. Gen: N. G. Bastos. Dir. Tec: O. Pagliari. Dir. Prgr. & Film Buyer: A. Nogueira. Station: chA6 25/2.5kW H. (relay st's at Itatiaia, Itapeva, Campos, Guaçui, Caxambu). D.Prgr: 18.00(Sat 15.00, Sun 13.00)–03.00.

7) **TELEVISÃO GLOBO**: Addr: Rua Von Martins 22, Jardim Botanico, Rio de Janeiro. Te: 46–8110. L.P: Dir: R. Marinho. Exec. Dir: W. Clark. Dir. Tec: L. A. de Medeiros. Station: chA4 120/60kW H. D.Prgr: 15.00–03.00.

8) **TELEVISÃO EXCELSIOR DE SÃO PAULO**: Addr: Rua Nestor Pestana, 196, São Paulo, SP. Te: 36-5329. Station: chA9 60/30kW H. D.Prgr: 15.00–05.00. Relay St's at Campinas, Poços de Caldas, Amparo, Itapetininga, Sorocaba, Itajubá, Casa Branca, Santa Rita, Araraquara, Bariri, Jaú, Garça, Baurú, Botucatú, Tatuí, Santos, Piracicaba.

9) **TELEVISÃO EXCELSIOR DO RIO DE JANEIRO**: Addr: Av. Venezuela, 43, Rio de Janeiro, GB. Te: 23-8185. Station: chA2 30/15kW H. D.Prgr: 15.00(Sun 12.00)–05.00.

10) **TELEVISÃO GAÚCHA**: Addr: C.P. 1164, Porto Alegre. Station: chA12 80/40kW. D.Prgr: 18.30–03.00.

11) **TELEVISÃO TRIÂNGULO**: Addr: Rua Olegário Maciel 530, 3° and, Uberlândia, MG. L.P: Dir: V. Vasconcellos. Station: chA8 10/5kW. D.Prgr: 19.00(Sun 17.00)–03.00.

12) **TELEVISÃO VILA RICA**: Addr: Rua Santa Rita Durão 1164, Belo Horizonte, MG. Station: chA7 40/20kW H. D.Prgr: 20.00–03.00.

13) **TELEVISÃO PAULISTA**: Addr: Rua das Palmeiras 322, São Paulo. Cable: Televisão. L.P: Dir. Gen: F. de Assis Rangel P. Dir. Tec: P. C. da Silva. Station: chA5 5/2.5kW H (relay st's at Campinas, Santos, Vale do Paraiba. Itajubá). D.Prgr: 18.00–03.00.

14) **TELEVISÃO TUPI DIFUSORA**: Addr: Bairro Sumaré, Rua Catalão 48, São Paulo. L.P: Dir: E. Monteiro. Station: chA4 6/3kW H. D.Prgr: 12.00–03.00. (Relay st's: Valinhos, Campinas, Limeira, Analândia, Santa Rita, Ribeirão Preto, São Carlos, Bragança Paulista, São José do Rio Preto, Bebedouro, Colina, Barretos, Olimpia, Mirassol, Poços de Caldas, Itajubá, Brasópolis, Campos do Jordão, Itatiaia and further 800 cities).

15) **TELEVISÃO CULTURA**: Addr: Rua Sete de Abril 230, São Paulo. Station: chA2 15.5/7.75kW H. D.Prgr: 19.00(Sun 17.00)–03.00. Relay st. at Campinas, ch16 50/50kW.

16) **TELEVISÃO RECORD**: Addr: Av. Miruna 713, São Paulo. L.P: Dir. Gen: E. A. Amaral Carvalho. Station: chA7 5/2.5kW H. D.Prgr: 18.00–03.00. (Relay st's at Valinhos chA22 50/25kW, Campos do Jordão ch17, Piracicaba ch19).

17) **TV-BANDEIRANTES**: Addr: C.P. 372, São Paulo. Te: 801613. L.P: see radio. Station: chA3 10/5kW H. D.Prgr: 13.00–05.00.

18) **TELEVISÃO RIBEIRÃO PRETO**: Addr: Ribeirão Preto, SP. Station: chA3 2/2kW H. D.Prgr: rel. TV-Tupi Difusora only.

19) **TELEVISÃO-BAURU**: Addr: Bauru, SP. Station: chA2 2/0.5kW H.

20) **TELEVISÃO PIRATINI**: Addr: Rua 7 de Setembro 1123, Porto Alegre, RGS. L.P: Dir. Gen: N. D. de Oliveira Comm. Mgr: J. J. Tartarotti. Dir. Prgr: A. Sales. Stations: chA5 25/12.5kW H. (relay st's at Sta. Cruz do Sul, B. Gonçalves, Nova Prata, Casca-Marau, Passo Fundo, Pelotas, Osorio, Sta. Maria, São Lourenco, Bom Jesus, Torres, Cachoeira do Sul, Antonio Prado (all in RGS); also Ararangua, Sidorópolis, Criciuma & Tubarão (in SC). D.Prgr: 14.45(Sat 15.00, Sun 11.55)–03.00.

21) **TELEVISÃO ALTEROSA**: Addr: Rua Afonso Peña 867, Belo Horizonte. Station: chA2 20/10kW h. D.Prgr: W 19.00–03.00, Sun 14.00–02.15.

22) **TV-BELO HORIZONTE**, Belo Horizonte, MG. Station: chA12 10/5kW H. D.Prgr: 15.00(Sat/Sun 14.00)–03.00.

23) **TELEVISÃO ITACOLOMI**: Addr: C.P. 1753, Belo Horizonte, MG. Te: 2-0944. Telex: 134. L.P: St. Mgr: Dr. P. Cabral. Dir. Tec: V. P. Netto. Dir. Prgr: J. O. Vaz. Film Buyer: P. Leal. Station: chA4 40/20kW H. D.Prgr: 19.20(Sat 17.10, Sun 12.50)–02.00.

24) **TELEVISÃO LAFAIETE**: Addr: Conselheiro Lafaiete, MG. Station: chA6 10/5kW H.

25) **TV MARIANO PROCÓPIO**: Addr: Rua Barão de S. Nepomuceno 197, Juiz de Fora. Station: chA10 10/5kW. D.Prgr: 18.00–03.00.

26) **TELEVISÃO CLUBE DE PERNAMBUCO**: Addr: Av. Cruz Cabuga 394, Recife, PE. Te: 4-1522. Cable: "Diarbuco". L.P: Dir. Gen: H. Motta. St. Mgr: F. Trigueiro. Dir. Prgr: A. Tavares. Station: chA6 10/5kW H. D.Prgr: 19.15(Sat 19.00, Sun 17.00)–02.30.

27) **TELEVISÃO JORNAL DO COMERCIO**: Rua Marquez de Recife, Recife, PE. Station: chA2 18/9kW H.

28) **TELEVISÃO PARANA**: Addr: Rua J. Loureiro 119, Curitiba. L.P: Dir: C. Guilherme Addor. Dir. Tec: J. Louro. Station: chA6 2/1kW. D.Prgr: 19.00–03.00.

29) **TELEVISÃO PARANAENSE**: Addr: Senador Slencar Guimarães 97, Curitiba, PA. L.P: Dir. Gen: Dr. N. Chede. Dir. Tec: O. B. Freire. Station: chA12 10/5kW H.

30) **TELEVISÃO CEARA**: Addr: C.P. 222, Fortaleza, CE. Te: 1-3125. Cable: "Prenove". L.P: Dir. Gen: Dr. M. E. P. Campos. Station: chA2 0.5/0.25kW H. D.Prgr: 20.00–03.00.

31) **TELEVISÃO ITAPOAN**: Addr: Rua Gomes 57, Salvador, BA. Te: PB/5-1143. Cable: Gremio. L.P: Dir. Gen: Dr. O. Tavares. St. Mgr: Dr. P. Nacife. Dir. Prgr: M. Augusto. Station: chA5 2/1kW H. D.Prgr: 19.55(Sat 17.30, Sun 16.30)–03.00

32) **TELEVISÃO MARAJOARA**: Addr: Av. Gov. José Malcher 1332, Belem, PA. Te: 3422. Cable: Provan. L.P: Dir. Gen: M.

Trindade. **Station:** chA2 1/0.5kW H. **D.Prgr:** 20.45(Sat 20.15, Sun 18.40)–03.00.

33) **TELEVISÃO R. CLUBE GOIANIA:** Addr: Av. Gois 17/19, Goiania, GO. Te: 4042. Cable: Folhago. Telex: 285. L.P: Dir. Gen: Dr. F. B. Sobrinho. Dir. Tec: Dr. V. P. Netto. Station: chA4 5/2.5kW H. D.Prgr: W 20.40–02.00(Sat 20.25–01.25). Sun 19.10–02.00.

34) **TELEVISÃO VITORIA:** Addr: Av. Jeronima 331, 10° and, Vitória, ES. Te: 3406. Cable: Ravito. L.P: Dir. Gen: N. Bastos. Dir. Tec: H. Pagliari. Station: chA4 5/2.5kW H. D.Prgr: 21.10 (Sat 20.00, Sun 19.00)–01.00.

35) **TELEVISÃO BORBOREMA:** Addr: Rua Venancio Neiva 287, Campina Grande, PB. Te: 1961. L.P: Dir. Gen: M. Motta. Dir. Tec: J. C. de Albuquerque. Station: chA9 5/2.5kW H. D.Prgr: 22.00–02.00.

36) **TV ANHANGUERA:** Addr: Goiania, Goiás. Station: chA2.

37) **TV COROADOS:** Addr: Londrina, Parana. Station: chA3. D.Prgr: 20.00–03.00.

38) **TV DIFUSORA DO MARANHÃO:** Addr: São Luiz, MA. Station: chA4.

39) **TV GUARANI:** Addr: R. Alvaro Muller 726, Campinas, SP. L.P: Dir. L. F. Torres. Dir. Prgr: L. Ziggiatti. Station: chA3 1/0.5kW H. D.Prgr: 20.00–03.00.

40) **TELEVISÃO UBERLANDIA:** Addr: Rua Buriti Alegre 1069, Uberlândia, MG. Station: chA8 1/0.5kW.

41) **TELEVISÃO MORENA:** Addr: Av. de Contôrno, Campo Grande, MT. Station: chA6 1/0.5kW.

42) **TELEVISÃO CENTRO AMERICA:** Addr: Cuiabá, MT. Station: chA4.

43) **TV-IGUAÇU:** Addr: Curitiba, PR. Station: chA4.

44) **TV-EREXIM:** Addr: Erexim, RS. Station: chA2.

45) **TV DA UNIVERSIDADE FEDERAL DE PERNAMBUCO:** Addr: Univ. Federal de Pernambuco, Recife, PE. Station: chA11.

Projected stations:
TV Farroupilha, Galeria Rosario 22, Porto Alegre, chA5 – **TV Gazeta**, São Paulo, chA11 – **TV Brazil Central**, Goiania, chA13 – **TV** Guaiaba Porto Alegre, chA2 – **TV Difusora do Maranhao**, São Luis, chA4.
TV sets: 2.500.000.

CHILE

UNIVERSIDAD DE CHILE (Educ.) – Addr: Huerfanos 1117. Of. 424, Santiago. Te: 80711. L.P: Dir: M. Planet. Dir. Tec: H. Barra, Station: chA9 3/1.5kW V. D.Prgr: 17.30–19.00, 22.00–03.45.

UNIVERSIDAD CATOLICA (Non-comm.) – Addr: Alameda 340, Santiago. Te: 380342; Av. Brasil 2059, Valparaiso. L.P: Dir. Gen: E. Tironi Arce. Dir. Tec: P. Carabal. Station: chA13 3/1.5kW H. Repeater st. (chA8) in Valparaiso. D.Prgr: 18.30–19.30, 22.30–04.00. TV sets: 55.000.

COLOMBIA

INSTITUTO NACIONAL DE RADIO Y TELEVISION
Addr: Apt. Nacional 1824, Bogotá. Te: 438244. L.P: Dir. Gen: W. Fadul. Dir. Tec: J. E. Nassar.
Stations: Bogota chA7 10/2kW, chA10 1/0.25kW – Manizales chA11 1/0.25kW – Jurisdicciones chA6 10/2kW – El Carmen chA9 1/0.25kW – Monteria chA7 1/0.25kW – S. Marta chA2 10/2kW – Medellin chA8 0.25kW – Tunja chA10 0.4kW – Madroño chA9 0.4kW – Belencito chA7 0.005kW – Cali chA11 10/2kW – Munchique (Popayan)chA 7 10/2kW – Galeras (Pasto) chA10 1/0.25kW.
D.Prgr's: 13.15–16.00 (Educ), 21.00–04.30 (Comm). Prgr's are originated at Bogotá, all other st's are repeaters.

Under construction: Medellin chA3 10/2kW – Neiva chA11 1/0.25kW – Quibdó chA13 0.25kW – Cucuta chA7 0.25kW.
TV sets: 300.000 – Fi: By Gov. and adv (40% of prgr's non-comm).

TELEBOGOTA (Official Comm.) – Addr: Ca. 22 No. 5-91, Bogota. Te: 434015. Cable: Protécnica – L.P: Dir. Gen: L. Montejo. Dir. Tec: M. Aguilar. Film Buyer: C. de Montejo – Station: chA9 16/4kW H D.Prgr: 22.00–04.00.

ECUADOR

PRIMERA TELEVISION ECUATORIANA S. A. (Comm.)
Addr: Casilla 5902, Guayaquil. Te: 10753. Cable: Telecuator; Casilla 70, Quito. Te: 17307. Cable: Teleseis – L.P: Dir. Gen: P. Norton. Mgr: M. Luque B. Dir. Tec: Q. Rivadeneira – Stations: Guayaquil chA4 2/1kW H, Quito chA6 2/1kW H – D.Prgr: 22.30–04.30. Test tr's: 22.00–22.25.

LA VENTANA DE LOS ANDES (Priv, Con-comm, cult.)
Addr: Casilla 691, Quito. L.P: Dir. R. B. Clark.
Station: HCJB-TV chA4 8/4kW H. D.Prgr: 23.30–03.10.
TV-sets 15.000.

GUIANA (French)

OFFICE DE RADIODIFF. TELEVISION FRANÇAISE (ORTF)
Addr: B.P. 336, Cayenne. Te: 355. L.P: St. Mgr: C. Barrat. Film Buyer: G. Guimont – Station (System K, 625 lines): Cayenne 175.25/181.75Mc 0.05kW H. (to operate from January 1967).

PARAGUAY

TELEVISION CERRO CORA S.A. (Comm.)
Addr: Ind. Nacional 349, 2° piso, Of. 205, Asunción. Te: 4398. L.P: Gen. Mgr: A. Ramirez G. St.Mgr: J. Sedano A. Dir. Adm: Dr. C. Morinigo D. Station: chA9 6/3kW. D.Prgr: 21.00–03.00 (Fri/Sun 04.00, Sat 04.30). – TV sets: 1.000.

PERU

Cultural

MINISTRY OF EDUCATION (Gov.): Addr: Ministerio de Educación Publica, Dirección de Cultura, Lima. Te: 75737. L.P: Dir: R. Garrido M. Dir. Tec: A. E. Mousalve. Station: OAD-TV chA7 150/75W H.

Commercial

TELEVISORA AMERICA: Addr: Montero Rosas, Lima. Te: 42919. L.P: Gen. Mgr: N. Gonzalez. Dir. Tec: D. Capella. Station: OAX4U-TV Lima ch4 6/3kW. Relay st: Huacho chA6.

TELEVISORA PANAMERICANA: Addr: Av. Arequipa 1110, Lima. Te: 34240. L.P: Gen. Mgr: G. Delgado P. Dir. Tec: G. Reusens. Stations: OAX4D-TV Lima chA5 10/5kW; Relay st's: Chimbote chA9, Trujillo chA7, Piura chA7.

TELEDOS: Addr: Av. Tacna 225, Lima. Te: 81694. L.P: St. Mgr: A. Prada. Dir. Tec: E. Tromcke. Station: Lima chA2 5/2kW V. D.Prgr: 15.00–03.30(Relay st's in Huancayo, Ancón & Ica). D.Prgr: 15.00–03.00.

TELEVISORA BEGO: Addr: Av. Manco Capac 333, Lima. L.P: Gen. Mgr: A. Belmont. Station: chA11.

TELEVISORA EL SOL: Addr: Av. Uruguay 355, Lima. Te: 35945. L.P: Gen. Mgr: N. Gonzales V. Station: chA9 10/5kW H. (Relay st's: Huacho chA7, Ica chA11). D.Prgr: 23.30(Sun 23.00)–05.00.

TELEVISORA PERUANA: Addr: Cas. 514, Arequipa. Te: 3090. Stations: chA2 0.5/0.25kW, Cuzco chA4. D.Prgr: 18.00–04.30.

TELEVISORA CONTINENTAL: Addr: M. de Orberoga 338, Arequipa. Station: chA6 8/4kW H. D.Prgr; 20.00–05.00.
TV sets: 210.000.

URUGUAY

SAETA (Sociedad anomina de Emisoras de Television y Anexos) (Comm.) – Addr: Tacuarembo 1234, Montevideo. Te: 402128. Cable: Saeta. L.P: Pres: R. Fontaina. Vice Pres: J. E. De Feo. Gen. Mgr: R. Fontaina Jr. Dir. Tec: A. Galimberti. Sales Mgr: M. Fontaina. Film Buyer: R. Fontaina h. Station: chA10 94/47kW H. D.Prgr: 13.15–00.15.

SODRE (Servicio Oficial de Difusión Radio Electrica): Addr: Boulevard Artigas, Colorado, Montevideo. L.P: See radio. Station: chA5 32/16kW. D.Prgr: 09.00–03.30.

TELEVISORA LARRANAGA S.A. (Comm.): Addr: Enriqueta Compte y Rique 1276, Montevideo. Te: 25856. L.P: Gen. Mgr. & Film Buyer: H. Scheck. Comm. Mgr: R. Rodriguez. Dir. Tec: M. Giampietro. Station: CXA12-TV chA12 100/50kW H. D.Prgr: 12.35–03.00.

MONTE CARLO TV (Comm.): Addr: Av. 18 de Julio 1855, Montevideo. Cable: Montecarlotv. Te: 402146. L.P: Dir. Gen: H. Romay Salvo. Dir. Tec: J. Goyret. Station: chA4 32/16kW H. D.Prgr: 12.35–03.30 – TV-sets: 200.000.

VENEZUELA

Def: 625 – Ch: A – Pol: H.

TELEVISORA NACIONAL (Gov.) – Addr: Apt. 3979, Caracas. Te: 545436. L.P: Dir. Gen: P. Francisco L. Dir. Tec: M. A. Burgos. Station: YVKA-TV chA5 400/200kW. D.Prgr: 21.30–04.30.

ONDAS DEL LAGO TV (Comm.) – Addr: Calle 74, Edif. Teleradiopolis, Maracaibo. Cable: Lagonda. L.P: Pres: N. Vale Q. Station: chA13 12/6kW H. D.Prgr: 18.00–04.00.

R. CARACAS TV (Comm.) – Addr: Apt. 2057, Caracas. Te: 418971. L.P: Dir. Gen: G. Tucker. Dir. Tec: A. E. Guia. Film Buyer: P. Botome. Stations: YVVA-TV Caracas chA2 60/30kW – Repeaters: Maracaibo chA2 66/33kW, Ci. Bolivar chA2 125/62.5W, Barquisimeto chA3 40/20kW, Barcelona chA3 100/50kW, Litoral Central chA7 10/5kW, Lago Valencia chA7 88/44kW, Trujillo chA7 275/137.5W, Merida chA7 400/200W, Táchira chA7 50/25kW, Pto. Cabello chA10 10/5kW, Falcón chA10 330/165kW, El Tigre chA10 10/5kW. D.Prgr: 12.30–05.00.

R. VALENCIA TV (Comm.) – Addr: Valencia. L.P: Dir. Gen: M. Gomez Leal. Dir. Tec: S. Serrera. Stations: YVXO-TV Valencia chA13 12/6kW, Caracas (repeater) YVXD-TV chA13 160/80kW. D.Prgr: 22.30–04.30.

VENEVISION (Comm.): Addr: Apt. 6674, Caracas. Te: 722741. Cable: Ventel. L.P: Gen. Mgr: E. Cuscó. Dir. Tec: E. Hamilton. Film Buyer: I. Klein. Stations: YVXA-TV Caracas chA4 90/45kW; Repeaters: Maracaibo chA4 35/17.5kW, Barquisimeto chA6 65/32.5kW, Barcelona chA7 30/15kW, Lago Valencia chA9 76/38kW, Litoral chA9 1.8/0.9kW, Táchira chA9 1.2kW, Coro chA12 1.5/0.75kW. D.Prgr: 19.00–04.00.

COLOR TELEVISION, Caracas – Station: YVUA-TV Caracas chA8 251/125.5kW; Repeaters: Maracaibo chA8 147/73.5kW, Barquisimeto chA7 110/55kW, Lago Valencia chA11 151/75.5kW, Litoral chA11 8/4kW.

CANAL ONCE TV (Comm.) – Addr: la Avenida Sta. Eduvigis, Caracas. L.P: Gen. Mgr: A. Espina. Dir. Tec: M. Sapowski. Stations: YVPX-TV Caracas chA11 110/55kW. (Repeater: chA3 90/45kW). D.Prgr: 14.00–03.30 – TV-sets: 650.000.

FREQUENCY BANDS ALLOCATED TO BROADCASTING, TELEVISION AND AMATEURS

The table is based upon the Geneva Regulations 1959. Some bands are shared with other services. In certain countries exceptions from the table below apply. **Region 1**: Europe, U.S.S.R. in Asia, Africa. **Region 2**: N. and S. America, Northeast Pacific. **Region 3**: Asia exc. U.S.S.R., Australia, N. Zealand, part of Pacific. [1]) Certain countries only, max 10W, special agreements.

	Region 1 kc	Region 2 kc	Region 3 kc
BC	150–285		
BC	525–1605	525–1605	525–1605
AMAT	1715–2000[1])	1800–2000	1800–2000
BC(trop)	2300–2498	2300–2495	2300–2495
BC(trop)	3200–3400	3200–3400	3200–3400
AMAT	3500–3800	3500–4000	3500–3800
BC	3950–4000		3900–4000
BC(trop)	4750–4995	4750–4995	4750–4995
BC(trop)	5005–5060	5005–5060	5005–5060
BC	5950–6200	5950–6200	5950–6200
AMAT	7000–7100	7000–7300	7000–7100
BC	7100–7300		7100–7300
BC	9500–9775	9500–9775	9500–9775
BC	11700–11975	11700–11975	11700–11975
AMAT	14000–14350	14000–14350	14000–14350
BC	15100–15450	15100–15450	15100–15450
BC	17700–17900	17700–17900	17700–17900
AMAT	21000–21450	21000–21450	21000–21450
BC	21450–21750	21450–21750	21450–21750
BC	25600–26100	25600–26100	25600–26100
AMAT	28000–29700	28000–29700	28000–29700

	Region 1 Mc West	Region 1 Mc East	Region 2 Mc	Region 3 Mc
BC(TV)	41–68	41–66		44–50
AMAT			50–54	50–54
BC(TV)			54–72	54–68
BC(TV)			76–88	
BC(FM)	87.5–100	66–73	88–108	87–108
BC(TV)	76–100			
AMAT	144–146		144–148	144–148
BC(TV)	174–216		174–216	170–216
AMÅT			220–225	
AMAT	430–440		420–450	420–450
BC(TV)	470–960		470–890	470–585
BC(TV)				610–960
AMAT	1215–1300		1215–1300	1215–1300
AMAT	2300–2450		2300–2450	2300–2450
AMAT			3300–3500	3300–3500
AMAT	5650–5850		5650–5925	5650–5850
AMAT	10000–10500		10000–10500	10000–10500
BC	11700–12700		11700–12700	11700–12700
AMAT	21000–22000		21000–22000	21000–22000

CALL SIGN ALLOCATIONS

(by alphabetical order of call signs)

The first character or the first two characters of a call sign indicates the nationality of the station using it.

AAA-ALZ USA
AMA-AOZ Spain
APA-ASZ Pakistan
ATA-AWZ India
AXA-AXZ Australia
AYA-AZZ Argentina
BAA-BZZ China
CAA-CEZ Chile
CFA-CKZ Canada
CLA-CMZ Cuba
CNA-CNZ Morocco
COA-COZ Cuba
CPA-CPZ Bolivia
CQA-CRZ Portug. prov.
CSA-CUZ Portugal
CVA-CXZ Uruguay
CYA-CZZ Canada
DAA-DTZ Germany
DUA-DZZ Philippines
EAA-EHZ Spain
EIA-EJZ Ireland
EKA-EKZ USSR
ELA-ELZ Liberia
EMA-EOZ USSR
EPA-EQZ Iran
ERA-ERZ USSR
ESA-ESZ USSR (Estonia.)
ETA-ETZ Ethipoia
EUA-EWZ USSR (Bielorussia)
EXA-EZZ USSR
FAA-FZZ France & terr.
GAA-GZZ U.K.
HAA-HAZ Hungary
HBA-HBZ Switzerland
HCA-HDZ Ecuador
HEA-HEZ Switzerland
HFA-HFZ Poland
HGA-HGZ Hungary
HHA-HHZ Haiti
HIA-HIZ Dominican Rep.
HJA-HKZ Colombia
HLA-HMZ Korea Rep.
HNA-HNZ Iraq
HOA-HPZ Panama
HQA-HRZ Honduras Rep.
HSA-HSZ Thailand
HTA-HTZ Nicaragua
HUA-HUZ El Salvador
HVA-HVZ Vatican State
HWA-HYZ France & terr.
HZA-HZZ Saudi Arabia
IAA-IZZ Italy
JAA-JSZ Japan
JTA-JVZ Mongolia
JWA-JXZ Norway
JYA-JYZ Jordan
JZA-JZZ Indonesia (West Irian)
KAA-KZZ USA
LAA-LNZ Norway
LOA-LWZ Argentina
LXA-LXZ Luxembourg
LYA-LYZ USSR (Lithuania)
LZA-LZZ Bulgaria
MAA-MZZ U.K.
NAA-NZZ USA
OAA-OCZ Peru
ODA-ODZ Lebanon
OEA-OEZ Austria
OFA-OJZ Finland
OKA-OMZ Czechoslov.
ONA-OTZ Belgium
OUA-OZZ Denmark
PAA-PIZ Netherlands
PJA-PJZ Neth. Antilles
PKA-POZ Indonesia
PPA-PYZ Brazil
PZA-PZZ Surinam
QAA-QZZ Sce. abbrev.
RAA-RZZ USSR
SAA-SMZ Sweden
SNA-SRZ Poland
SSA-SSM UAR
SSN-STZ Sudan
SUA-SUZ UAR
SVA-SZZ Greece
TAA-TCZ Turkey
TDA-TDZ Guatemala
TEA-TEZ Costa Rica
TFA-TFZ Iceland
TGA-TGZ Guatemala
THA-THZ France & terr.
TIA-TIZ Costa Rica
TJA-TJZ Cameroon
TKA-TKZ France & terr.
TLA-TLZ C.African Rp.
TMA-TMZ France & terr.
TNA-TNZ Brazzaville
TOA-TQZ France & terr.
TRA-TRZ Gabon
TSA-TSZ Tunisia
TTA-TIZ Chad
TUA-TUZ Ivory Coast
TVA-TXZ France & terr.
TYA-TYZ Dahomey
TZA-TZZ Mali
UAA-UQZ USSR
URA-UTZ USSR (Ukr.)
UUA-UZZ USSR
VAA-VGZ Canada
VHA-VNZ Australia
VOA-VOZ Canada
VPA-VSZ British overseas terr.
VTA-VWZ India
VXA-VYZ Canada
VZA-VZZ Australia
WAA-WZZ USA
XAA-XIZ Mexico
XJA-XOZ Canada
XPA-XPZ Denmark
XQA-XRZ Chile
XSA-XSZ China
XTA-XTZ Upper Volta
XUA-XUZ Cambodia
XVA-XVZ Vietnam
XWA-XWZ Laos
XXA-XXZ Portuguese overseas terr.
XYA-XZZ Burma
YAA-YAZ Afghanistan
YBA-YHZ Indonesia
YIA-YIZ Iraq
YJA-YJZ N. Hebrides

continued page 281

PROGRAM DISTRIBUTORS

ABC Films, Inc., 1330 Avenue of the Americas, New York, New York, 10019
Branches: ABC Films of Canada, Ltd., 45 Charles St. East, Toronto, Canada
ABC Films. Inc., Glarnischstrasse 22, 8712 Stafa/zh, Switzerland
Talent Promotion of Australia Pty Ltd., 105 Walker Street, North Sydney, N.S.W., Australia
Century Publicidade Ltda., Rua da Lapa 120-3° Andar, Rio de Janeiro, Brazil
TV Interamericana Do Brasil Ltda., P.O. Box 6197, Sao Paulo, Brazil
Mrs. R. Wilson, 37 Longfield House, 18/20 Uxbridge Road, Ealing W. 5, England
Diane Abramson, Piazza San Salvatore In Laura, 13/Apt. 8, Rome, Italy
Ray Falk, Asahi Shimbun Bldg., Rm 615, 32-chome, Yuraku-cho, Chiyoda-ku, Tokyo, Japan
TV Interamericana S.A., Porfirio Diaz 195, Mexico 12, D.F
TV Representations, Diego Ferre 216, Miraflores, Lima, Peru
Pla, Alfredo, c/Maria de Molina 1, Madrid 6, Spain
ABC Films, Inc., 1313 N. Vine Street, Hollywood, Calif.90028
ABC Television Network, 1330 Avenue of the Americas, New York, New York 10019
Branches: 190 N. State Street, Chicago 1, Illionis
277 Golden Gate Avenue, San Francisco, California
4151 Prospect Avenue, Hollywood 27, California
20777 W. Ten Mile Road, Northwestern Highway, Detroit, Michigan
ABC Television Ltd., Vogue House, Hanover Square, London W. 1, England
Air Programs International, 38 Martin Place, Sydney, Australia
M & A Alexander Productions, Inc., 8530 Wilshire Boulevard, Beverly Hills, Calif.
Allied Artists TV Corp., 165 West 46th Street, New York, New York
American International TV, Inc., 165 West 46th Street, New York, New York
Branch: 7165 Sunset Boulevard, Los Angeles, California
Anglia Television Ltd., Brook House, Park Lane, London W. 1, England
ATV Network, ATV House, 17 Great Cumberland Place, London W. 1, England
Branches: Independent Television Corp., 555 Madison Avenue, New York, New York 10022
ITC of Canada Ltd., 100 University Avenue, Toronto 1, Canada
Atlantic Television Inc., 130 West 46th Street, New York, New York
Award Films, 20 North Wacker Drive, Chicago, Illinois 60606
George Bagnall & Associates, Inc., 8827 Olympic Blvd., Beverly Hills, Calif.
Banner Films, Inc., 527 Madison Avenue, New York, New York10022,
Ben Barry & Associates, 155 East 55th Street, Penthouse E, New York New York 10022
BBC Television Enterprises, Inc., Television Centre, London W. 12, England
Branch: 630 Fifth Avenue, New York, New York 10020
Big Fights, Inc., 9 East 40th Street, New York, New York 10016
Border Television Ltd., 14 Curzon Street, London W. 1, England
Buena Vista Distributing Co., 477 Madison Avenue, New York, New York 10022
CBS Films, Inc., 51 West 52nd Street New York, New York 10019
Branches: CBS (Europe) S.A., Chamerstrasse 18, 1600 Zug, Switzerland
CBS (Europe) S.A., Succursale Italiana, 45 Via Ludovisi, Rome, Italy
CBS Limited, Villiers House, Strand, London W.C. 2, England
CBS Japan, Inc., Mitsuwa Bldg., 5, Nishi 6-chome, Ginza, Chuo-Ku, Tokyo, Japan
CBS Films Pty Ltd., Suite 2, Colman House, Berry & Walker Streets, North Sydney, Australia
Taiyang Trading Co., 60,1 Ka, Myung-Dong Chung-Ku, Seoul, Korea
African Films & Features (Pvt.) Ltd., 806 Central House, 3 Central Avenue, Salisbury, Rhodesia
Moral Yousuf Bahbehani, P.O. Box 146, Kuwait, Arabia
CBS (Europe) S.A., Georgenstrasse 27, Munich 13, Germany
Agence Francaise De Television, 12 Rue Gaillon, Paris, France
CBS Films Canada Ltd., 45 Charles Street East, Toronto 5, Canada
CBS Filmes do Brasil Ltd., Caixa Postal 30.554, Sao Paulo, Brazil
CBS (Europe) S.A., P.O. Box 3627, Lagos, Nigeria
CBS (Europe) S.A., P.O. Box 2604, Beirut, Lebanon
CBS Latino Americana, Inc., 100 Biscayne Boulevard, Miami, Florida
CBS Films, Inc., 6121 Sunset Boulevard, Hollywood, California 90028
CBS Television Network, 51 West 52nd Street, New York, New York 10019
Branches: 630 North McClurg Court, Chicago, Illinois 60611
932 Fisher Bldg., Detroit, Michigan 48202
7800 Beverly Blvd., Los Angeles, California 90028
S. W. Caldwell Ltd., 447 Jarvis Street, Toronto, Canada
Cavalcade Television Program, 959 North Fairfax Avenue, Hollywood, California
Channel Television, 195 Knightsbridge, London, S. W. 7, England
Cheryl TV Corp., 3084 Motor Avenue, Los Angeles, California
Church of England Television Society, 511 Kent Street, Sydney, Australia
Cinema-Vue Corp., 245 West 55th Street, New York, New York 10019
Cinepix, Inc., 5000 Wellington Street, Montreal 19, Quebec, Canada
Colorama Features Inc., 10 East 49th Street, New York, New York 10017
Commonwealth Film & TV Inc., 723 Seventh Avenue, New York, New York 10019
Continental Telefilms Agency (C.T.A.), 14, rue Victor Greyson, Brussels 5, Belgium
Tom Corradine & Associates, 1404 N. Van Ness Avenue, Los Angeles, California
Desilu Sales, Inc., 780 N. Gower, Hollywood, California
Branches: 905 Woodshire Lane, St. Louis, Missouri 63141
300 Spalding Drive, N. E., Atlanta, Georgia
25 Berkeley House, Hay Hill, London W. 1, England
Penthouse 10, Village on the Green, 55 Maitland Street, Toronto, Ontario, Canada
GPO Box 4272, 112a King Street, Sydney, N.S.W., Australia
Dola Films Ltd., 137 Wellington Street West, Toronto, Canada
Dynamic Films, Inc., 405 Park Avenue, New York, New York 10022
Embassy Pictures Corp., 1301 Avenue of the Americas, New York, New York 10019
Branch: 8831 Sunset Boulevard, Suite 301, Los Angeles, California
Eurafilm, 56 Blvd. d'Italie, Monte Carlo, Monaco
Branch: 380 Lexington Avenue, New York, New York 10017
Film Art Television Pictures, 21 Dundas Square, Toronto, Canada
Flamingo Telefilm Sales, Inc., 529 Fifth Avenue, New York, New York 10017
Fleetwood Films, Inc., 10 Fiske Place, Mt. Vernon, New York
Four Star International, Inc., 555 Madison Avenue, New York, New York 10022
Franklin Television Productions, 1454 Peerless Place, Los Angeles 35, California
Fremantle International, Inc., 366 Madison Avenue, New York, New York 10017
Branches: Empire House, 119 Regent St., London W. 1, England
257 Jarvi Street, Toronto, Ontario, Canada
Via Monte Giordano 36, Rome, Italy
1396 St. Catherine Street, Montreal Quebec, Canada
Alderson Bldg., St. Leonards, N.S.W., Australia
Mitchell Gertz Agency, 338 North Rodeo Drive, Beverly Hills, California
Grampian Television Ltd., Nuffield House, 41 Piccadilly, London W. 1, England
Granada TV Overseas, 36 Golden Square, London W. 1, England
Greatest Fights of the Century, Inc,. 9 East 40th Street, New York, New York 10016
Harriscope Broadcasting Corporation, 291 S. La Cienega Blvd., Beverly Hills, California
Hoffberg Productions, Inc., 321 West 44th Street, New York, New York 10036
Hollywood Television Service, 11969 Ventura, Blvd, North Hollywood, California 91606
Branches: 660 Madison Avenue, New York, New York
37 Baseler Strasse, Frankfurt, Germany
277 Victoria Street, Toronto, Ontario, Canada
Sovereign Film Dist. Ltd., 3811 Edmonton Trail, Calgary, Alberta, Canada
1200 St. Alexander Street, Montreal, Quebec, Canada
133 Princess Street, Saint John, N.B., Canada
2178 W. 12th Street, Vancouver, B.C., Canada
281 Colony Street, Winnipeg, Manitoba, Canada
Ideal Pictures, Inc., 1010 Church Street, Evanston, Illinois 60201
Branches: 1619 N. Cherokee, Hollywood, California 90028
321 W. 44th Street, New York, New York 10036

Intertel, International Television Development Corporation, 527 Madison Avenue, New York, New York
Jayark Films Corporation, 733 Third Avenue, New York, N.Y. 10017
King Features Syndicate TV Division, 235 East 45th Street, New York, New York 10017
Branch: 10850 Riverside Drive, North Hollywood, California
MCA-TV, Film Syndication Division, 445 Park Avenue, New York, New York 10022
Branches: U.C. Studios, 100 Universal City Plaza, Universal City, California
139 Piccadilly, London, W. 1, England
33 Avenue Champs Elysees, Paris, France
151 Bloor Street West, Toronto 5, Ontario, Canada
9 Via Tevere, Rome, Italy
Koeniginstrasse 29, 8 Munich 22, Germany
Hamburgo 70, Mexico 6, D.F.
Hotel New Japan, Suite 881, 29 Nagata-cho 2 chome Chiyoda-ku, Tokyo, Japan
Universal House, Poplar & Pelican Streets, Sydney, Australia
1434 West Ste. Catherin Street, Montreal 25, Canada
Colisee Building, Hamra Street, Beirut, Lebanon
Medallion Pictures Corp., 200 West 57th Street, New York, New York 10019
Branch: 444 Madison Avenue, New York, New York 10022
MGM-TV, 1350 Avenue of the Americas, New York, N.Y. 10019
Branches: MGM Studios, Culver City, California
340 Victoria Street, Toronto, Canada
Modern Sound Pictures Incs., 1410 Howard Street, Omaha 2, Nebraska
NBC International, 30 Rockefeller Plaza, New York, New York 10020
Branches: NBC International (Great Britain) Ltd., 36 Berkeley Square London W. 1, England
NBC (Canada) Ltd., 500 University Avenue, Toronto 2, Canada
NBC International De Mexico, S.A., Apartado, Postal 24313, Mexico City, Mexico
NBC International Australia Pty Ltd., 251 Elisabeth Street, Sydney, N.S.W., Australia
NBC Television Network, RCA Building, Radio City, New York, New York 10020
Branch: 3000 West Alameda, Burbank, California
National Film Board, 3255 Cote de Liesse Road, Montreal, Canada
National Film Board of Canada, 680 Fifth Avenue, Suite 819, New York, New York 10019
National Telefilm Associates, Inc., 8530 Wilshire Blvd., Beverly Hills, California
Branches: 750 Third Avenue, New York, New York
Eagle House, 109 Jermyn Street, London S.W. 1, England
175 Bloor Street East, Toronto 5, Canada
Weteringschans 245, Amsterdam, Holland
6 Frankfurt a Main, Westend Strasse 89, Germany
Princesa 10, Madrid, Spain
3, 5, Chome, Ginza, Tokyo, Japan
No. 4 Penang Road, P.O. Box 1356, Singapore 9
900 Mahachai Road, Bangkok, Thailand
Callao 1370 p.b. Buenos Aires, Argentina
Official Films, Inc., 724 Fifth Avenue, New York, New York
Prime TV Films, Inc., 120 West 57th Street, New York, N.Y. 10019
Princeton Film Center Inc. P.O. Box 431 Mt. Lucas Road, Princeton, New Jersey
Branch: 1456 N. Bronson Avenue, Hollywood, California
Radio and Television Packagers, Inc., 11 East 40th Street, New York, New York 10016
RCA Recorded Program Services, 155 East 24th Street, New York, New York 10010
Walter Reade Organization, Inc., 241 East 34th Street, New York, New York
Rediffusion Television Ltd., Television House, Kingsway, London W.C. 2, England
Stuart Reynolds Productions, 9465 Wilshire Boulevard, Beverly Hills California 90212
Riviera Productions, 6610 Selma Ave., Hollywood 28, California.
Peter M. Robeck & Co., Inc., 230 Park Ave., New York, N.Y. 10017
Walter Schwimmer Inc., 410 N. Michigan Ave., Chicago, Ill.
Branch: 112 Central Park South, New York, N.Y.
Scottish Television Ltd., Theatre Royal, Glasgow, Scotland
Screen Gems Inc., 711 Fifth Ave., New York, N.Y. 10022
Branches: 72 Carlton St., Toronto, Ontario, Canada
1245 Sherbroke St. West, Montreal 25, Quebec, Canada
535 W. Georgia St., Vancouver 3, British Columbia, Canada
Plaza de la Republica 43, Mexico 1, D.F.
P.O. Box 422, San Juan, Puerto Rico 00902
Avda. Callao 449-3er Piso, Buenos Aires, Argentina
Rua Santa Isabel 160-7, Sao Paulo, Brazil
169 Regent St., London, England
5, Avenue Velasquez, Paris 8, France
Ickstattstrasse 1, Munich, Germany
26 College St., Sydney, Australia
17-20 6-chome Shimbashi, Minato Ku, Tokyo, Japan
P.O. Box 3373, Avenue Rizal, Manila, Philippine Islands
708 Mahachai Road, Bangkok, Thailand
Seven Arts Associated Corp., 200 Park Avenue, New York, New York 10017
Branches: 3562 Royal Wood Drive, Sherman Oaks, California
11 Adelaide Street West, Toronto, Ontario, Canada
Seven Arts House, 24 Berkeley Square, London W. 1,; England
Show Corp. of America, International Bldg., 45 Rockefeller Plaza, New York, N.Y. 10020
Southern Television Ltd., Glen House, Stag Place, London S.W. 1, England
Sovereign Films Ltd., 277 Victoria Street, Toronto, Canada
Sportlite Films, 20 North Wacker Drive, Chicago, Illinois 60606
Sterling Films, Ltd., King Edward Hotel, Toronto, Canada
Storer Programs. Inc., 338 S. Western Avenue, Los Angeles, California 90005
T.W.W. Ltd., 207 Sloane Street, London, S.W. 1, England
Teledynamics Corporation, 729 Seventh Avenue, New York, New York 10019
Tele-Features Inc., 516 Fifth Avenue, New York, New York 10036
Telesynd (Division of Wrather Corp.), 375 Park Avenue, New York, New York
Time-Life Broadcast, Inc., Time & Life Building, New York, New York 10020
Trans-Lux Television Corporation, 625 Madison Avenue, New York, New York 10020
Trans-Lux Television International Corporation, Utoquai 29, Zurich 8, Switzerland
Turn of the Century Fights, Inc., 9 East 40th Street, New York, New York 10016
Twentieth Century-Fox TV Inc., 444 West 56th Street, New York, New York 10019
Branches: P.O. Box 900, Beverly Hills, California
25 Terrace Drive, N.E., Apt. 5, Atlanta, Georgia
550 W. Jackson Boulevard, Chicago, Illinois
110 Bond Street, Toronto 2, Ontario, Canada
31–32 Soho Square, London W. 1, England
12 Rue de la Croix D'Or, Geneva, Switzerland
33 Champs Elysees, Paris 8e, France
P.O. Box 3731, Mexico 1. D.F.
Box 1790 Moadie Bldg., Monot Street, Beirut, Lebanon
Karolinenplatz No. 6, Munich, Germany
Box 521, Tokyo Central, Japan
43–51 Brisbane Street, Sydney, Australia
Il Sarayet el Ezbekieh, Cairo, Egypt
Tyne Tees Television Ltd., 1 Great Cumberland Place, London W. 1, England
Ulster Television Ltd., 1 Hanover Square, London W. 1, England
UN Television, United Nations, New York, New York
United Artists Associated, Inc., 555 Madison Avenue, New York, New York 10022
Branches: 520 N. Michigan Avenue, Chicago, Illinois 60611
15130 Ventura Boulevard, Sherman Oaks, California 91403
922 Monrovia, Shreveport, Louisiana 71106
2 Carlton Street, Toronto 2, Ontario, Canada
United Artists Television, Inc., 555 Madison Avenue, New York, New York 10022
Branches: 9229 Sunset Boulevard, Los Angeles, California
United Artists Television of Canada, Carlton Towers, Toronto 2, Ontario, Canada
United Artists Television International Division, 729 Seventh Avenue, New York, New York 10019
United Press International 220 East 42nd Street, New York, New York 10017
Branches: 6520 Selma Avenue, Los Angeles, California
575 University Street, Montreal, Quebec, Canada
8 Bouverie Street, London, E.C. 4, England
New Mainichi Bldg., Tokyo, Japan
Avenida Belgrano 271, Buenos Aires, Argentina
Van Coevering Outdoor Productions, 20 North Wacker Drive, Chicago, Illinois 60606
Warner Brothers Television Division, 666 Fifth Avenue, New York, New York 10019
WBC Program Sales, Inc., 240 West 44th Street, New York, New York
Westward Television Ltd., 4–7 Woodstock Street, London, W. 1, England
Winik Films Corporation, 1501 Broadway, New York, New York
Wolper Television Sales, Inc., 485 Lexington Avenue, New York, New York 10017

LONG- AND MEDIUM WAVE STATIONS

EUROPE — NORTH AFRICA — NEAR EAST

For medium waves of the other countries see the individual countries. – Compiled by Tor-Henrik Ekblom

Alg. = Algeria; Az. = Azores; Aust. = Austria; Belg. = Belgium; Bulg. = Bulgaria; C. Isl. = Canary Islands; Cyp. = Cyprus; Czecho. = Czechoslovakia; Den. = Denmark; F. = France; Faeroe. = Faeroe Islands; Finl. = Finland; G = Germany; Gr. = Greece; Gt. Br. = Great Britain; Holl. = Holland; Hung. = Hungary; Icel. = Iceland; It. = Italy; Mon. = Monaco; Mor. = Morocco; No. = Norway; Port. = Portugal; Rum. = Rumania; REM = Red de Emisoras del Movimiento; Sp. = Spain; Sw. = Sweden; Switz. = Switzerland.

kc/s	Metres	kW	Stations
151	1987	50	**Moscow I** - USSR
—	1987	50	**Mainflingen** (Deutschl.funk)
155	1935	10	**Tromsø** - Norway
—	1935	600	**Brasov** - Rumania
164	1829	250/500	**Allouis** - France
173	1734	500	**Moscow I** - USSR
—	1734	20	**Chita** - USSR
180	1667	400/100	**R. Europa I** - G
—	1648	240	**R. Ankara** - Turkey
182	1648	10	**Luleå** - Sweden
185	1622	750	**Deutschlands.** - G
191	1571	600	**Motala** - Sweden
200	1500	100	**Moscow III** - USSR
—	1500	400	**Droitwich** - Gt. Br.
209	1435	150	**Kiev I** - USSR
—	1435	20	**Eidar** - Iceland
—	1435	100	**Reykjavik** - Iceland
215	1400	1250	**Monte Carlo** - Mon.
218	1376	200	**Oslo** - Norway
—	1376	50	**Krasnoyarsk** - USSR
227	1322	500	**Warsaw I** - Poland
233	1287	600	**Luxembourg I**
236	1271	100	**Leningrad I** - USSR
245	1224	150	**Kalundborg I** - Den.
—	1224	100	**Erzurum** - Turkey
254	1184	200	**Lahti** - Finland
263	1141	150	**Moscow II** - USSR
—	1141	100	**R. Wolga** - DDR
272	1102.9	200	**CS I** - Czechosl.
281	1068	100	**Minsk** - USSR
385	779	50	**Kharkov** - USSR
395	759.5	100	**Moscow IV** - USSR
400	750	50	**Minsk** - USSR
433	693	10	**Oulu** - Finland
520	577	2	**Braunschweig** - (**NDR**) - G
—	577	1	**Joensuu** - Finland
—	577	0.2	**Bayreuth** (**BR**) - G
—	577	0.2	**Kempten** (**BR**) - G
—	577	0.2	**Würzburg** (**BR**) - G
—	577	0.25	**Rørås** - Norway
—	577	0.05	**2 low power** - Aust.
—	577	10	**Aldrans II** - Austria
—	577	10	**Lienz II** - Austria
—	577	10	**Lieten II** - Austria
529	561.1	220	**Schwerin** (**DDR**) - G
—	561.1	150	**Beromünster** - Swit.
539	556.5	135	**R. Kossuth** - Hung.
—	556.5	0.05	**Bayonne II** - F.
—	556.5	0.005	**3 low power** - Italy
—	556.5	1/200	**R. Kuwait** - Kuwait
548	547.4	100	**Odessa** - USSR
—	547.4	200	**Königslutter** (**D.funk**) - G
—	547.4	20	**B. Dürrheim** (**D.funk**) - G
—	547.4	50	**Oviedo** (**RNE**) - Sp.
—	547.4	300	**Oran I** - Algeria
555	540.5	5	**Bucuresti** - Rum.
557	538.6	100	**Helsinki I** - Finland
—	538.6	50	**Cairo III** - Egypt
—	538.6	50	**M. Ceneri** - Switz.
—	538.6	5	**Greifswald** (**DDR**) - G
—	538.6	1	**Faro** - Portugal
—	538.6	1	**Guarda** - Portugal
—	538.6	1	**Touggourt** - Alger.
566	530	0.05	**5 low power** - Aust.
—	530	0.1	**Feistritz** - Austria
—	530	100	**Athlone** - Ireland
—	530	5/25	**Caltanisetta I** - Italy
—	530	5	**Salento** - Italy
—	530	20/100	**Freies Berlin** - G
566	530	300	**Damascus** - Syria
575	521.7	300	**Mühlacker** (**SDR**), G
—	521.7	100	**Riga I** - USSR
—	521.7	4	**Laghourt** - Algeria
—	521.7	120	**Leipzig** (**DDR**) - G
—	521.7	50/10	**Tel Aviv** - Israel
584	513.7	1	**Paris III** - France
—	513.7	5	**Thorshavn** - Faroe.
—	513.7	200	**Madrid** (**RNE**) - Sp.
—	513.7	25	**Klagenfurt II** Austria
—	513.7	10	**Salzburg II** - Aust.
—	513.7	150	**Wien II** - Austria
—	513.7	0.05	**Mayerhofen** - Aust.
—	513.7	0.05	**Sfax I** - Tunesia
593	505.9	150	**Sundsvall** - Sweden
—	505.9	100	**Frankfurt** (**HR**) - G
—	505.9	20	**Meissner** (**HR**) - G
—	505.9	200	**Sofia II** - Bulgaria
—	505.9	100	**Ouida I** - Morocco
602	498.4	20	**Karl-Marx-St.** - G
—	498.4	50	**Beni Suef I** - Egypt
—	498.4	5	**Sfax II** - Tunesia
—	498.4	100	**Lyon I** - France
606	495	20	**Nicosia** - Cyprus
611	491	10	**Nürnberg-Gr.wöhr** Germany
—	491	10	**Kaiserslaut.** - G
—	491	140	**Sebaa-Aioun** - Mor.
—	491	250	**Berlin** (**DDR**) - G
—	491	100	**Petrozavodsk** - USSR
—	491	100	**Sarajevo** - Yugosl.
620	483.9	450	**Batra I** - Egypt
—	483.9	150	**Bruxelles I** - Belg.
—	483.9	100	**Tenerife** (**RNE**) - Can. Isl.
628	477	30	**Timisoara II** - Rum.
629	477	100	**Vigra I** - Norway
—	477	600	**Tunis I** - Tunesia
—	477	25	**Aldrans I** - Austria
—	477	25	**Lauterach** - Austria
—	477	1	**Lienz I** - Austria
—	477	20	**Erfurt** (**DDR**) - G
630	476	0.25	**AFRTS** - Iran
638	470.5	100	**BBC** - Cyprus
—	470.5	100	**La Coruña** (**RNE**) - Sp.
—	470.5	150	**Praha** - Czechoslov.
647	463.6	100	**Simferopol** - USSR
—	463.6	150	**Daventry** - Gt. Br.
—	463.6	2	**Edinburgh** - Gt. Br.
—	463.6	2	**Glasgow** - Gt. Br.
—	463.6	2	**Newcastle** - Gt. Br.
—	463.6	2	**Redmos** - Gt. Br.
650	461.5	7.5	**R. Tabriz** - Iran
656	457.3	20	**Bolzano III** - Italy
—	457.3	80	**Firenze I** - Italy
—	457.3	80	**Napoli I** - Italy
—	457.3	35	**Torino I** - Italy
—	457.3	10	**Venezia I** - Italy
—	457.3	20	**Potsdam** (**DDR**), G
—	457.3	150	**Murmansk** - USSR
—	457.3	100	**Tel Aviv** - Israel
665	451.2	15	**Athens III** - Greece
—	451.2	1	**Höfn** - Iceland
—	451.2	100	**Damascus** - Syria
—	451	300	**Bodenseesender** - G
—	451	135	**Lisboa I** - Portugal
—	451	100	**Vilnius I** - USSR
674	445.1	0.05	**8 low power** - Aust.
—	445.1	10	**Bodö** - Norway
—	445.1	100	**Tjernovtsy** - USSR
—	445.1	150	**Marseilles I** - Fr.
674	445.1	100	**Benghazi** - Libya
677	443	20	**Jerusalem** - Jordan
680	441.2	1	**R. Rasht** - Iran
683	439	400	**Beograd** - Yugosl.
—	439	40/100	**Berlin/Hof** (**RIAS**)
—	439	250	**Sevilla** (**RNE**) - Sp.
692	434	1	**Bouira** - Algeria
—	434	20	**Nicosia** - Cyprus
—	434	250	**Deutschlands.** - G
—	434	2	**Cromer** - Gt. Br.
—	434	150	**Moors. Edge** - Gt. Br.
—	434	2	**Whitehaven** - Gt.Br.
701	428	2	**Aurich** (**NDR**) - G
—	428	5	**Flensburg** (**NDR**) - G
—	428	2	**Lingen** (**NDR**) - G
—	428	5	**Aachen** (**WDR**) - G
—	428	2	**Siegen** (**WDR**) - G
—	428	2	**Herford** (**WDR**) - G
—	428	400	**BBC** - Perim Isl.
—	428	150	**Istanbul** - Turkey
—	428	140	**Sebaa-Aioun II** - Morocco
—	428	20	**Finnmark** - Norway
—	428	100	**B. Bystrica** - Czech.
710	422	150	**Rennes I** - France
—	422	150	**Donetsk** - USSR
—	422	100	**Asyut II** - Egypt
—	422	150	**Tallinn** - USSR
—	422	1	**Jerusalem** - Israel
719	417.2	135	**R. Free Europe** - G
—	417.2	100	**BBC** - Cyprus
—	417.2	25	**Norte I** - Portugal
—	417.2	150	**Östersund** - Sweden
—	417.2	2	**Damascus** - Syria
728	412.1	25	**Klagenfurt I** - Aust.
—	412.1	150	**Athens I** - Greece
—	412.1	250	**Deutschlands.** - G
737	407.1	40	**Hof** (**RIAS**) - G
—	407.1	100/200	**Tel Aviv** - Israel
—	407.1	5	**Akureyri** - Iceland
—	407.1	300	**Poznan** - Poland
—	407.1	250	**Barcelona** (**RNE**) - Sp.
—	407.1	20	**Moscow II** - USSR
746	402	100	**Aleppo** - Syria
—	402	30	**Plovdiv** - Bulgaria
—	402	20	**Cottbus** (**DDR**) - G
—	402	120	**Hilversum I** - Holl.
—	402	1	**Tlemcen** - Algeria
755	397.3	20	**Kuopio** - Finland
—	397.3	130	**Timisoara I** - Rum.
—	397.3	135	**Lisboa II** - Portugal
—	397.3	20	**Ravensburg** (**D.funk**) - G
764	392.6	150	**Sottens** - Switzerl.
—	392.6	150/300	**Baghdad** - Iraq
—	392.6	10	**Odessa** - USSR
773	388.1	150	**Stockholm** - Sweden
—	388.1	2	**Malmberget** - Sw.
—	388.1	25	**San Sebastian** (**RNE**) - Sp.
—	388.1	30	**Stolnik** - Bulgaria
—	388.1	500	**Cairo I** - Egypt
—	388.1	1	**Salzburg I** - Aust.
—	388.1	0.05	**9 low power** - Aust.
—	388.1	0.1	**Leoben** - Aust.
—	388.1	0.05	**Zagreb II** - Yugosl.
777	387	100	**Zahedan** - Iran
782	383.6	250	**Deutschlands.** - G
—	383.6	100	**R. Clube Portuguese**
—	383.6	100	**Kiev II** - USSR
—	383.6	2	**Vatican Radio**

kc/s	Metres	kW	Stations
782	383.6	2	**Rijeka II** - Yugosl.
—	383.6	2	**Split II** - Yugosl.
—	383.6	2	**Sisak II** - Yugosl.
786	381	10	**Damascus** - Syria
791	379.2	50	**Thessaloniki I** - Gr.
—	379.2	100	**Limoges I** - France
800	375	100	**München (BR)** - G
—	375	0.15	**Porto** - Portugal
—	375	100	**Leningrad II,** USSR
800	375	20	**R. Madrid** - Spain
—	375	100	**Amman** - Jordan
809	370.8	100	**Burghead** - Gt. Br.
—	370.8	5	**Redmoss** - Gt. Br.
—	370.8	2	**Dumfries** - Gt. Br.
—	370.8	100	**Westerglen** - Gt. Br.
—	370.8	135	**Skopje** - Yugosl.
—	370.8	5	**R. Sevilla** - Spain
817	367.2	5	**R. Barcelona** - Sp.
818	366.7	10	**Trieste I** - Italy
—	366.7	450	**Batra II** - Egypt
—	366.7	300	**Warszawa II** - Pol.
—	366.7	1	**Casablanca I** - Mor.
—	366.7	300	**Sudradio** - Andorre
827	363	100	**Sofia I** - Bulgaria
—	363	1	**Rabat I** - Morocco
—	363	100	**Oujda** - Morocco
—	363	40	**Freiburg (SWF),** G
—	363	0.5	**Koblenz (SWF)** - G
—	363	1,5	**Baden-Baden (SWF)** - G
—	363	1	**Trier (SWF)** - G
—	363	3	**Kaisersl. (SWF),** G
833	360.5	1	**Benghazi (FBS)** - Libya
836	359	10	**Ylivieska** - Finland
—	359	150	**Nancy I** - France
—	359	5	**Huelva** - Spain
—	359	5	**Voz Granada** - Sp.
—	359	100	**Beyrouth I** - Leb.
—	359	20	**Kharkov** - USSR
—	359	1	**P. Delgada** - Azores
845	355	150	**Roma II** - Italy
—	355	1	**Jerusalem** - Israel
854	351.3	150	**Bucuresti I** - Rum.
—	351.3	100	**Berlin (RIAS)** - G
—	351.3	125	**Murcia (RNE)** - Sp.
—	351.3	0.05	**Setif** - Algeria
863	348	300	**Paris I** - France
—	348	30	**Blagoevgrad** - Bulg.
—	348	100/10	**Damascus** - Syria
872	344	150	**Frankfurt AFN** - G
—	344	5	**Petöfi II** - Hung.
—	344	36	**Budapest** - Hungary
—	344	20	**R. Zaragoza** - Sp.
—	344	150	**Moscow** - USSR
—	344	10	**Tenerife** - C. Isl.
—	344	50	**Cairo V** - Egypt
881	340.5	100	**Titograd** - Yugosl.
—	340.5	0.05	**Slavonski Brod,** - Yugosl.
—	340.5	100	**Berlin (DDR)** - G
—	340.5	8	**Penmon** - Gt. Br.
—	340.5	5	**Towyn** - Gt. Br.
—	340.5	100	**Washford** - Gt. Br.
—	340.5	2	**Wrexham** - Gt. Br.
890	337.1	200	**Alger II** - Algeria
—	337.1	20	**Linz I** - Austria
—	337.1	20	**Bergen I** - Norway
—	337.1	20	**Kristiansand** - No.
—	337.1	20	**Tröndelag** - Norway
—	337.1	50	**Uzjgorod** - USSR
—	337.1	7.5	**Limassol (FBC)** - Cyprus
895	335	50	**R. Teheran** - Iran
899	333.7	150	**Milano I** - Italy
—	333.7	1	**Vukovar** - Yugosl.
908	330	140	**Brookm.Prk,** Gt. Br.
—	330	200	**Baghdad** - Iraq
—	330	250	**Burg (DDR)** - G
—	330	7	**Miercurea** - Rum.
915	326	2	**Paphos** - Cyprus
917	327.2	5	**Tetuan II** - Morocco
—	327.2	20	**Reichenbach (DDR)** - G
—	327.2	12	**R. Madrid EAJ2,** Sp.
917	327.2	135	**Ljubljana I** - Yugosl.
926	324	150	**Brussels II** - Belg.
—	324	10	**Nis** - Yugoslavia
—	324	10	**Cairo IV** - Egypt
935	321	100	**Agadir** - Morocco
—	321	300	**Lvov** - USSR
—	321	250	**Burg (DDR)** - G
—	321	10	**Berlin (AFN)** - G
944	318	100	**Toulouse I** - France
—	318	5	**Larissa (FBS)** - Gr.
—	318	20	**Voronej** - USSR
953	314.6	20	**R. Intercont.** - Sp.
—	314.6	10	**L. Palmas** - Can. Isl.
953	314.6	60	**Aleppo** - Syria
—	314.6	100/15	**Brno** - Czechoslov.
962	312	0.05	**5 low power** - Aust.
—	312	100	**Turku I** - Finland
—	312	100	**Tunis II** - Tunesia
963	311.6	2	**Istanbul** - Turkey
971	309	5	**Göttingen (NDR)** G
—	309	300	**Hamburg (NDR)** G
—	309	40	**Hannover (NDR),** G
—	309	40	**Oldenburg (NDR)** G
—	309	5	**Bonn (WDR)** - G
—	309	3	**Kleve (WDR)** - G
—	309	150	**Smolensk** - USSR
—	309	1	**Marrakech** - Mor.
—	309	100	**Izmir** - Turkey
976	307.4	0.5	**R. Rezaieh** - Iran
980	306.1	5	**Cairo II** - Egypt
—	306.1	200	**Alger I** - Algeria
—	306.1	2	**Trieste A** - Italy
—	306.1	150	**Göteborg** - Sweden
985	302	100	**Kermanshan** - Iran
989	303.3	300/100	**Berlin (RIAS)** - G
—	303.3	50	**Madrid (RNE)** - Sp.
—	303.3	10	**Beyrouth** - Lebanon
998	300.6	10	**Heidelberg (SDR)**
—	300.6	0.2	**Buchen (SDR)** - G
—	300.6	400	**R. Andorra**
—	300.6	100	**Kishinjov** - USSR
1007	297.9	6	**Malaga (RNE)** - Sp.
—	297.9	120	**Hilversum II** - Holl.
—	297.9	50	**Corfu** - Greece
1016	295	300	**Rheinsender (SWF)**
—	295	100	**Baku** - USSR
—	295	1	**Batna** - Algeria
—	295	1	**Tanger III** - Mor.
1025	292.7	100	**Dobl** - Austria
—	292.7	100	**Kronstorf** - Austria
—	292.7	10	**Lauterach II** - Aust.
—	292.7	5	**Mariapfarr II** - Aust.
—	292.7	0.05	**8 low power** - Aust.
—	292.7	0.5	**Haifa** - Israel
—	292.7	5	**R. J. Cataluña** - Sp.
—	292.7	5	**R. S. Sebastian** - Sp.
—	292.7	1	**2 low power** - Mor.
1033	290.4	2	**Izmir** - Turkey
1034	290.4	0.25	**Ansbach (AFN)** - G
—	290.4	0.25	**B. Kissingen (AFN)** Germany
—	290.4	0.25	**Karlsruhe (AFN)** G
—	290.1	20	**Milano II** - Italy
—	290.1	25	**Venezia II** - Italy
—	290.1	10	**Genova II** - Italy
—	290.1	5	**San Remo II** - Italy
—	290.1	5	**Pescara II** - Italy
—	290.1	25	**Napoli II** - Italy
—	290.1	100	**Tallinn I** - USSR
—	290.1	25	**R.Clube Portuguese**
1043	287.6	5	**Thessaloniki** - Gr.
—	287.6	250	**Dresden (DDR)** - G
—	287.6	25	**Sebaa-Aioun** - Mor.
1052	285.3	0.05	**9 low power** - Aust.
—	285.3	20	**Tetuan I** - Morocco
—	285.3	2	**Barnstaple** - Gt. Br.
—	285.3	120	**Start Point** - Gt. Br.
—	285.3	50	**Bacau** - Rumania
—	285.3	50	**R. Tripoli** - Libya
—	285.3	20	**Suhl (DDR)** - G
1060	285	1	**R. Shiraz** - Iran
1061	283	25	**Norte II** - Portugal
—	283	60	**Kalundborg II,** Den.
—	283	20	**Cagliari I** - Italy
—	283	1	**Livorno I** - Italy
1063	282.2	2	**Ankara** - Turkey
1070	280	100	**Paris II** - France
—	280	20	**Dnjepropetr.,** USSR
1079	278	5	**Minia** - Egypt
—	278	5	**Luxor** - Egypt
—	278	5	**Bremerhafen** - G
—	278	60	**Katowice** - Poland
—	278	1	**Souk Ahras** - Alger.
—	278	20	**Plauen (DDR)** - G
—	278	25	**Valencia (RNE)** Sp.
—	278	20	**La Voz de Madrid**
1088	276	150	**Droitwich** - Gt. Br.
—	276	7.5	**Postwick** - Gt. Br.
—	276	50	**Tirana** - Albania
1090	275	1	**R. Kerman** - Iran
1097	273.5	150	**Bratislava** - Czecho.
—	273.5	2	**Cádiz** - Spain
—	273.5	2	**Asturias** - Spain
—	273.5	20	**L. Palmas** - Can. Isl.
—	273.5	1	**Haifa** - Israel
1100	272	1	**R. Mashhad** - Iran
1106	271.2	100	**Munich (AFN)** - G
—	271.2	2	**R. Antequera** - Sp.
—	271.2	2	**R. Coruña** - Sp.
—	271.2	2	**R. Manresa** - Sp.
—	271.2	2	**R. Alcoy** - Sp.
—	271.2	2	**R. Huesca** - Sp.
—	271.2	2	**R. Extramadura** - Spain
—	271.2	2	**R. Salamanca** - Sp.
—	271.2	2.5	**R. Victoria** - Sp.
—	271.2	2	**R. León** - Sp.
—	271.2	3.8	**R. Orense** - Sp.
—	271.2		**R. Linares** - Sp.
—	271.2	2	**R. Ceuta** - Spain
—	271.2		**R. Panadés** - Sp.
—	271.2	100	**Vilnius II** - USSR
1115	269.1	50	**Bologna II** - Italy
—	269.1	5	**Messina II** - Italy
—	269.1	1	**Trieste II** - Italy
—	269.1	1	**Aosta II** - Italy
—	269.1	40	**Bari II** - Italy
—	269.1	10	**Pisa II** - Italy
—	269.1	0.25	**Alta** - Norway
—	269.1	0.25	**Arendal** - Norway
—	269.1	1	**Bø i Vesterålen** - Norway
—	269.1	0.25	**Lista** - Norway
—	269.1	0.04	**Mo i Rana** - Norway
—	269.1	1	**Namsos** - Norway
—	269.1	0.25	**Notodden** - Norway
—	269.1	20	**Kaliningrad** - USSR
—	269.1	1	**Tanger II** - Morocco
1124	266.9	10	**Barcelona** - Spain
—	266.9	10	**Bruxelles** - Belg.
—	266.9	10	**Varna** - Bulgaria
—	266.9	0.1	**Bruck/Mur** - Aust.
—	266.9	0.05	**10 low power** - Aust.
—	266.9	0.1	**Kötschach** - Austria
—	266.9	0.1	**Mürzzuschlag** - Austria
—	266.9	0.1	**Villach** - Austria
—	266.9	20	**Leningrad III** - USSR
1133	264.8	0.02	**Alftafjörd** - Iceland
—	264.8	1	**Voz Palencia** - Sp.
—	264.8	5	**Voz Extremad** - Sp.
—	264.8	1	**Voz Castellon** - Sp.
—	264.8	5	**Voz Asturias** - Sp.
—	264.8	5	**Voz de Vigo** - Sp.
—	264.8	5	**Voz Mediterr.** - Sp.
—	264.8	5	**Voz de Navarra** - Spain
—	264.8	2	**Murcia** - Spain
—	264.8	2	**Almería** - Spain
—	264.8	2	**Aranda de Duero** - Spain
—	264.8	2	**Ponferrada** - Spain
—	264.8	2	**Viscaya** - Spain
—	264.8	2	**Calahorra** - Spain
—	264.8	5	**Malaga** - Spain
—	264.8	15	**R. Gredos** - Spain
—	264.8	5	**Voz Guadalquivir** - Spain
—	264.8	5	**Voz Ci. Real** - Spain
—	264.8	5	**Voz de Jaen** - Spain

kc/s	Metres	kW	Stations
1133	264.8	3	**R. Atalaya** - Sp.
—	264.8	3	**Voz de Lugo** - Spain
—	264.8	3	**Voz Tierra** - Sp.
—	264.8	5	**Zaragoza** - Sp.
—	264.8	135	**Zagreb** - Yugoslavia
—	264.8	20	**Rijeka I** - Yugosl.
—	264.8	50	**Split I** - Yugoslavia
—	264.8	2	**Zadar** - Yugoslavia
—	264.8	2	**Dubrovnik** - Yugosl.
—	264.8	2	**Osijek** - Yugoslavia
—	264.8	2	**Güimar** - Can. Isl.
—	264.8	1/200	**R. Kuwait** - Kuwait
—	264.8	2	**Adana** - Turkey
1142	262.7	40	**Constantine** - Alg.
—	262.7	0.05	**9 low power** - Aust.
—	262.7	1	**Ulm (AFN)** - Germ.
—	262.7	1	**Göppingen (AFN)** G
—	262.7	0.25	**Hersfeld (AFN)** - G
—	262.7	0.25	**Schweinfurt (AFN)**
—	262.7	0.25	**Würzburg (AFN)**, G
—	262.7	5	**Bremerhafen (AFN)**
—	262.7	10	**Stuttgart (AFN)** - G
—	262.7	20	**Athens (FBC)** - Gr.
—	262.7	5	**Sohag** - Egypt
—	262.7	50	**Moscow II** - USSR
1149	261.1	50	**Cluj** - Rumania
1151	260.6	2	**Scarborough, Gt.Br.**
—	260.6	100	**Stagshaw** - Gt. Br.
—	260.6	1	**Marrakech** - Mor.
1160	258.6	150	**Strassbourg I** - Fr.
—	258.6	30	**Kardjali** - Bulg.
1165	257.5	2	**Kars** - Turkey
1169	256.6	10	**Porto** - Portugal
—	256.6	20	**Koper** - Yugoslavia
—	256.6	5	**Ulm (SDR)** - G
—	256.6	10	**Heilbronn (SDR)**, G
—	256.6	10	**Thessaloniki** - Gr.
—	256.6	150	**Kiev** - USSR
—	256.6	1	**Jerusalem** - Israel
1178	254.7	100	**Hörby** - Sweden
—	254.7	10	**Assuan** - Egypt
—	254.7	10	**Quena** - Egypt
—	254.7	20	**Barcelona (RNE)** - Spain
—	254.7	10	**BBC** - Malta
—	254.7	2	**Van** - Turkey
1187	252.7	1	**Casablanca II** - Mor.
—	252.7	135	**Szolnoc I** - Hungary
—	252.7	5	**Cuenca (RNE)** - Sp.
1196	251	300	**Munich (VOA) - G**
—	251	0.1	**Portoalegre** - Port.
1200	250	0.75	**Izmir** - Turkey
1205	249	100	**Bordeaux I** - France
—	249	60	**Krakow** - Poland
—	249	60	**Rzescow** - Poland
—	249	10	**Haifa** - Israel
1210	248	2	**Gaziantep** - Turkey
1214	247.1	50	**Brookmans Park** - Gt. Br.
—	247.1	20	**Burghead** - Gt.Br.
—	247.1	10	**Lisnagarvey, Gt.Br.**
—	247.1	50	**Moorside Edge** - Gt. Br.
—	247.1	50	**Westerglen** - Gt.Br.
—	247.1	0.25	**Londonderry**, Gt.Br
—	247.1	0.5	**Plymouth** - Gt. Br.
—	247.1	2	**Redmoss** - Gt. Br.
—	247.1	2	**Redruth** - Gt. Br.
—	247.1	2	**Newcastle** - Gt. Br.
—	247.1	1	**R. Malta** - Malta
—	247.1	20	**Kursk** - USSR
—	247.1	20	**Tallin II** - USSR
—	247.1	0.05	**Bjelovar** - Yugosl.
—	247.1	5	**Tripoli** - Libya
1223	245.3	30	**Stara Zagora**, Bulg.
—	245.3	0.05	**Bloemendaal** - Holl.
—	245.3	5	**Madrid (RNE)** - Sp.
—	245.3	100	**Falun** - Sweden
1232	243.5	50	**Tanger** - Morocco
—	243.5	100	**Kosice** - Czecho.
1241	241.7	25	**Vaasa** - Finland
—	241.7	20	**Lille II** - France
—	241.7	20	**Lyon II** - France
—	241.7	20	**Marseilles II** - Fr.
—	241.7	20	**Nancy II** - France
—	241.7	20	**Nice II** - France
1241	241.7	20	**Brest I** - France
—	241.7	24	**Rennes II** - France
—	241.7	50	**Odessa** - USSR
—	241.7	0.05	**Radlje** - Yugosl.
1250	240	10	**Dublin, Cork**, - Irel.
—	240	10	**Hilversum III** - Holland
—	240	135	**Balatonszab** - Hung.
—	240	0.01	**AFRS** - Turkey
1259	238.3	150	**Rhodos (VOA)** - Gr.
—	238.3	5	**R. Badajoz** - Sp.
—	238.3	5	**R. Valencia** - Sp.
—	238.3	2	**R. Valladolid** - Sp.
—	238.3	30	**Zielona Gora** - Pol.
—	238.3	50	**Wroclaw** - Poland
1268	236.6	100	**Novi Sad** - Yugosl.
1277	234.9	10	**Alexandria** - Egypt
—	234.9	10	**Assuan II** - Egypt
—	234.9	100	**Strassbourg II** - Fr.
—	234.9	20	**Moscow III** - USSR
1286	233	100	**Praha** - Czechoslov.
—	233	2.5	**Lisboa** - Portugal
1295	231.7	30	**Shumen** - Bulg.
—	231.7	150	**Crowbor.** - Gr. Br.
—	231.7	1/0.2	**Isl. of Man** - Bt. Br.
—	231.7	1	**Rabat III** - Morocco
—	231.7	2	**Antalya** - Turkey
1300	230.6	0.2	**Shkodra** - Albania
1304	230	20	**Constantine II**, Alg.
—	230	20	**Oran II** - Algeria
—	230	0.25	**Bamberg (AFN)** - G
—	230	0.25	**Berchtesgaden (AFN)** - G
—	230	1	**Heidelberg (AFN)** -
—	230	0.25	**Regensburg (AFN)**
—	230	0.25	**Fulda (AFN)** - G
—	230	0.25	**Wertheim (AFN)**, G
—	230	160	**Szczecin** - Poland
—	230	30	**Gdansk** - Poland
1313	228.5	100	**Stavanger** - Norway
—	228.5	0.05	**14 low power** - Aust.
—	228.5	0.1	**Knittelfeld** - Aust.
—	228.5	0.1	**Kötschach** - Aust.
—	228.5	1	**Florina (FBS)** - Gr.
—	228.5	5	**Sevilla (RNE)** - Sp.
—	228.5	50	**Simferopol** - USSR
1315	228	2	**Constantza** - Rum.
1322	226.9	1	**Safi II** - Morocco
—	226.9	150	**Leipzig (DDR)** - G
—	226.9	0.5	**R. Ribatejo** - Port.
—	226.9	100	**Kharkow** - USSR
1325	226.4	100	**R. Tehran** - Iran
1330	225.6	0.05	**Brcko** - Yugosl
1331	225.4	2	**Aosta** - Italy
—	225.4	2	**Udine** - Italy
—	225.4	2	**Catania** - Italy
—	225.4	80	**Roma I** - Italy
—	225.4	50	**Genova I** - Italy
—	225.4	25	**Bologna I** - Italy
—	225.4	25	**Pescara I** - Italy
—	225.4	20	**Bari I** - Italy
—	225.4	12	**Palermo I** - Italy
—	225.4	1	**Trento** - Italy
—	225.4	0.1	**Elvas** - Portugal
—	225.4	20	**Kothla-Järve**, USSR
—	225.4		**Pärmu** - USSR
1336	226.6	1.5	**Haifa** - Israel
1340	223.8	25	**Nyiregyháza**, Hung.
—	223.8	25	**Szombathely**, Hung.
—	223.8	15	**Pécs** - Hungary
—	223.8	100	**Lisnagarvey**, Gt. Br.
—	223.8	0.25	**Londonderry** - Gt. Br.
1343	223.4	0.25	**B. Mellal** - Morocco
1345	223.2	200/1	**R. Kuwait** - Kuwait
1349	222.4	10	**Nantes I** - France
—	222.4	20	**Bordeaux II** - Fr.
—	222.4	20	**Limoges II** - France
—	222.4	20	**Grenoble I** - France
—	222.4	20	**Toulouse II** - Fr.
—	222.4	0.2	**Korça** - Albania
—	222.4	0.4	**2 low power** - Hung.
—	222.4	20	**Valmiera** - USSR
—	222.4	20	**Kuldiga** - USSR
—	222.4	20	**Madona** - USSR
1350	222.2	20	**Baghdad** - Iraq
1355	221.3	1	**Kavalla** - Greece
1358	221	1	**Viseu** - Portugal
—	221	250	**Berlin (DDR)** - G
—	221	20	**Bremen** - Germany
—	221	100	**Tirana** - Albania
—	221	0.5	**Haifa** - Israel
1363	220.1	0.05	**Molve** - Yugoslavia
1367	219.5	0.5	**Trento** - Italy
—	219.5	2	**Verona** - Italy
—	219.5	1	**Bologna** - Italy
—	219.5	2	**Firenze** - Italy
—	219.5	1	**Pisa** - Italy
—	219.5	1	**Siena** - Italy
—	219.5	1	**Catania** - Italy
—	219.5	1	**Bari** - Italy
—	219.5	1	**Messina** - Italy
—	219.5	2	**Palermo** - Italy
—	219.5	2	**Sassari** - Italy
—	219.5	25	**Venezia III** - Italy
—	219.5	12	**Napoli III** - Italy
—	219.5	10	**Genova III** - Italy
—	219.5	10	**Milano III** - Italy
—	219.5	5	**Roma III** - Italy
—	219.5	5	**Torino III** - Italy
—	219.5	0.5	**Savièse** - Switz.
—	219.5	50	**Lodz II** - Poland
—	219.5	60	**Bialystok** - Poland
—	219.5	60	**Lublin** - Poland
—	219.5	10	**Porto** - Portugal
—	219.5		**Moscow II** - USSR
1376	218	150	**Lille I** - France
—	218	50	**Kiev II** - USSR
1385	217	25	**R. Centro** - Sp.
—	217	3	**Voz Palma** - Sp.
—	217	2	**Galicia** - Sp.
—	217	2	**Baleares** - Sp.
—	217	50	**Athens II** - Greece
—	217	150	**Kaunas** - USSR
1390	215.8	100	**R. Ahwaz** - Iran
1394	215.2	25	**Graz** - Austria
—	215.2	0.05	**13 low power** - Aust.
—	215.2	0.2	**Spittel/Drau** - Aust.
—	215.2	0.2	**Zell/Zee** - Aust.
—	215.2	1	**Augsburg (AFN)**, G
—	215.2	0.25	**Bitburg (AFN)** - G
—	215.2	0.25	**Crailsheim (AFN)**
—	215.2	0.25	**Hof (AFN)** - G
—	215.2	2	**Albacete** - Spain
—	215.2	2	**Alicante** - Spain
—	215.2	2	**Astorga** - Spain
—	215.2	2	**Badajoz** - Spain
—	215.2	2	**Palma-Mallorca**, Sp.
—	215.2	2	**Córdoba** - Spain
—	215.2	2	**Reus** - Spain
—	215.2	2	**S. Sebastian** - Spain
—	215.2	2	**Zamora** - Spain
—	215.2	2	**Zaragoza** - Spain
—	215.2	0.15	**Borås** - Sweden
—	215.2	0.25	**Göteborg** - Sweden
—	215.2	0.15	**Halmstad** - Sweden
—	215.2	0.15	**Hudiksvall** - Sw.
—	215.2	0.15	**Karlstad** - Sweden
—	215.2	0.15	**Kiruna** - Sweden
—	215.2	0.15	**Ludvika** - Sweden
—	215.2	0.15	**Luleå** - Sweden
—	215.2	0.15	**Malmberget** - Sw.
—	215.2	0.15	**Mariestad** - Sweden
—	215.2	0.15	**Piteå** - Sweden
—	215.2	0.15	**Stockholm** - Sweden
—	215.2	0.15	**Sundsvall** - Sweden
—	215.2	0.15	**Söderhamn** - Sw.
—	215.2	0.15	**Uddevalla** - Sweden
—	215.2	0.15	**Varberg** - Sweden
—	215.2	0.15	**Vänersborg** - Sw.
—	215.2	0.15	**Västervik** - Sweden
—	215.2	0.15	**Örnsköldsvik** - Sw.
—	215.2	1	**Angra** - Azores
1400	214	0.01	**2 low power** - Icel.
1403	213.8	10	**Montpellier I** - Fr.
—	213.8	20	**Rouen** - France
—	213.8	20	**Brest II** - France
—	213.8	4	**Bastia** - France
—	213.8	20	**Cl. Ferrand** - Fr.
—	213.8	20	**Pau** - France
—	213.8	5	**Comotini** - Greece
—	213.8	10	**Kiev** - USSR

kc/s	Metres	kW	Stations
1403	213.8	10	**Orissare** - USSR
—	213.8	20	**Tartu** - USSR
1412	212.4	3	**B. Mergentheim** - G
—	212.4	400	**Heusweiler (Saar)** G
—	212.4	2	**R. Galicia** - Spain
—	212.4	5	**R. Bilbao** - Spain
—	212.4	5	**R. Granada** - Spain
—	212.4	2	**R. Castellón** - Spain
—	212.4	2	**R. Murcia** - Spain
—	212.4	9	**R. Castilla** - Spain
—	212.4	2	**R. Gijon** - Spain
—	212.4	2	**R. Requeté** - Sp.
—	212.4	2	**R. Segovia** - Spain
—	212.4	0.3	**R. Ci. Real** - Spain
—	212.4	0.2	**R. Tarrasa** - Spain
—	212.4	1	**R. Onteniente** - Sp.
—	212.4	2	**R. Algeciras** - Spain
—	212.4	5	**Maribor** - Yugosl.
—	212.4	2	**Osijek** - Yugoslavia
—	212.4	20	**Gospic** - Yugoslavia
—	212.4	100	**Pristina** - Yugosl.
—	212.4	2	**Helsinki II** - Finl.
—	212.4	0.4	**Turku II** - Finland
—	212.4	1	**Cl. Tenerife** - Can. Isl.
—	212.4	0.02	**6 low power** - Icel.
1421	211.2	40	**Alger III** - Algeria
—	211.2	100	**BBC** - Cyprus
—	211.2	1	**Tampere** - Finland
—	211.2	10	**Riga** - USSR
1425	211	1	**Malta (FBS)**
—	211	1	**R. Isfahan** - Iran
1428	210.5	6	**Oradea** - Rum.
1430	210	10	**Copenhagen II** - Denmark
—	210	70	**Skive** - Denmark
—	210	0.2	**Gjirokastra** - Alb.
—	210	250	**Berlin (DDR)** - G
—	210	2	**Puertollano** - Spain
—	210	2	**Figueras** - Spain
—	210	2	**Huelva** - Spain
—	210	2	**León** - Spain
—	210	2	**Lérida** - Spain
—	210	2	**Lorca** - Spain
—	210	0.4	**Menorca-Mahon**, Sp.
—	210	2	**Malaga** - Spain
—	210	2	**Valencia** - Spain
1439	208	350	**Luxembourg II** -
—	208	1	**Tobruk (FBS)**, Lib.
—	208	1	**Nicosia (FBS)**, Cyp.
1448	207.2	20	**Torino II** - Italy
—	207.2	12	**Palermo II** - Italy
—	207.2	5	**Ancona II** - Italy
—	207.2	5	**Catania II** - Italy
—	207.2	5	**Firenze II** - Italy
—	207.2	5	**Sassari II** - Italy
—	207.2	0.1	**Alessandria** - Italy
—	207.2	0.1	**Biella** - Italy
—	207.2	0.1	**Cueno** - Italy
—	207.2	1	**Como** - Italy
—	207.2	1	**Sondrio** - Italy
—	207.2	1	**Brucino** - Italy
—	207.2	1	**Trento** - Italy
—	207.2	1	**Merano** - Italy
—	207.2	0.1	**Belluno** - Italy
—	207.2	1	**Cortina** - Italy
—	207.2	2	**Verona** - Italy
—	207.2	1	**Udine** - Italy
—	207.2	1	**La Spezia** - Italy
—	207.2	0.1	**Siena** - Italy
—	207.2	1	**Perugia** - Italy
—	207.2	0.1	**Ascoli P.** - Italy
—	207.2	1	**Campob.** - Italy
—	207.2	0.1	**Benevento** - Italy
—	207.2	0.1	**Salerno** - Italy
—	207.2	1	**Foggia** - Italy
—	207.2	1	**Lecce** - Italy
—	207.2	10	**Salento** - Italy
—	207.2	1	**Taranto** - Italy
—	207.2	1	**Matera** - Italy
—	207.2	0.1	**Potenza** - Italy
—	207.2	1	**Catanzaro** - Italy
—	207.2	1	**Cosenza** - Italy
—	207.2	1	**Agrigento** - Italy
—	207.2	1	**Caltanisetta** - Italy
—	207.2	1	**Cagliari** - Italy

kc/s	Metres	kW	Stations
1448	207.2	0.15	**Falkenberg** - Sw.
—	207.2	0.5	**Gävle** - Sweden
—	207.2	1.5	**Hudiksvall** - Sw.
—	207.2	2	**Jönköping** - Sweden
—	207.2	1.5	**Karlskrona** - Sw.
—	207.2	0.15	**Kristinehamn** - Sw.
—	207.2	0.15	**Säffle** - Sweden
—	207.2	2	**Trollhättan** - Sw.
—	207.2	2	**Umeå** - Sweden
—	207.2	0.5	**Visby** - Sweden
—	207.2	2	**Västerås** - Sweden
—	207.2	1	**Coimbra** - Portugal
1457	206	0.05	**4 low power** - Aust.
—	206	0.1	**Judenburg** - Aust.
—	206	2	**Redruth** - Gt. Br.
—	206	20	**Clevedon** - Gt. Br.
—	206	10	**Bartley** - Gt. Br.
—	206	2	**Brighton** - Gr. Br.
—	206	1	**Folkestone** - Gt. Br.
—	206	2	**Bexhill** - Gt. Br.
—	206	20	**Craiova** - Rumania
1462	205	1	**R. Gorgan** - Iran
1466	204.6	400	**Monte Carlo** - Mon.
—	204.6	0.25	**Geilo** - Norway
—	204.6	1	**Kautekeino** - Nor.
—	204.6	1	**Narvik** - Norway
—	204.6	0.25	**Odda** - Norway
—	204.6	0.25	**Porsgrunn** - Nor.
—	204.6	0.25	**Sandnessjøen** - Nor.
—	204.6	1	**Svalbard** - Norway
1475	203.4	2	**R. Cádiz** - Spain
—	203.4	2	**R. Reus** - Spain
—	203.4	5	**R. Mallorca** - Spain
—	203.4	2	**R. Rioja** - Spain
—	203.4	2	**R. Asturias** - Spain
—	203.4	2	**R. Gandia** - Spain
—	203.4	1	**R. Santander** - Sp.
—	203.4	2	**R. Pontevedra** - Sp.
—	203.4	2	**R. Almeria** - Spain
—	203.4	1	**R. Zamora** - Spain
—	203.4	3	**R. Sabadell** - Spain
—	203.4	2	**R. Córdoba** - Spain
—	203.4	5	**R. Elche** - Spain
—	203.4	150	**Wien I** - Austria
—	203.4	0.05	**4 low power** - Aust.
—	203.4	1	**R. Sanandaj** - Iran
1480	202.7	0.4	**La Orotava** - C. Isl.
1484	202.2	0.2	**St. Pölten** - Austria
—	202.2	2	**Praha** - Czech.
—	202.2	2	**Bratislava** - Czech.
—	202.2	2	**Copenhagen I** - Den.
—	202.2	0.25	**Alborg** - Denmark
—	202.2	0.25	**Tønder** - Denmark
—	202.2	1	**Pietarsaari** - Finl.
—	202.2	1	**Pori** - Finland
—	202.2	0.05	**3 low power** - Fr.
—	202.2	1	**Montpellier II** - Fr.
—	202.2	1	**Perpignan** - France
—	202.2	1	**Dijon** - France
—	202.2	1	**Poitiers** - France
—	202.2	0.5/1	**R. Gibraltar**
—	202.2	2	**Baia Mare** - Rum.
—	202.2	2	**Brasov** - Rumania
—	202.2	2	**Resita** - Rumania
—	202.2	2	**Sibiu** - Rumania
—	202.2	2	**Tg. Mures** - Rum.
—	202.2	2	**Barrow** - Gt. Br.
—	202.2	2	**Ramsgate** - Gt. Br.
—	202.2	1	**Volos** - Greece
—	202.2	5	**Freies Berlin** - G
—	202.2	0.2	**Wertheim (SDR)**, G
—	202.2	0.2	**Heidenheim (SDR)**
—	202.2	0.2	**Bopfingen (SDR)**, G
—	202.2	0.2	**Adelsheim (SDR)**, G
—	202.2	0.25	**Keflavik** - Iceland
—	202.2	0.02	**3 low power** - Icel.
—	202.2	2	**Bolzano** - Italy
—	202.2	0.1	**Bressanone** - Italy
—	202.2	0.1	**Vicenza** - Italy
—	202.2	0.1	**Gorizia** - Italy
—	202.2	0.1	**Savona** - Italy
—	202.2	0.1	**Arezzo** - Italy
—	202.2	0.1	**Terni** - Italy
—	202.2	1	**Aquila** - Italy
—	202.2	0.1	**Teramo** - Italy
—	202.2	1	**Avellino** - Italy

kc/s	Metres	kW	Stations
1484	202.2	1	**Brindisi** - Italy
—	202.2	1	**Nuoro** - Italy
—	202.2	1	**R. Madeira**
—	202.2	10	**Benghazi** - Libya
—	202.2	1	**Tobruk (FBS)**, Lib.
—	202.2	0.25	**Brønnøysund** - Nor.
—	202.2	0.25	**Glomfjord** - Norway
—	202.2	1	**Karasjok** - Norway
—	202.2	0.25	**Mosjøen** - Norway
—	202.2	0.25	**Rjukan** - Norway
—	202.2	8	**Lodz** - Poland
—	202.2	1	**Kielce** - Poland
—	202.2	1	**Olsztyn** - Poland
—	202.2	2	**Zakopane** - Poland
—	202.2	2	**Szczecinek** - Poland
—	202.2	2	**Slupsk** - Poland
—	202.2	1	**Jel. Góra** - Poland
—	202.2	5	**R. Teruel** - Spain
—	202.2	0.5	**Limassol** - Cyprus
—	202.2	5	**Bruxelles IV** - Belg.
—	202.2	0.5	**Bruxelles III** - Belg.
—	202.2	2	**Belgrade II**, Yugosl.
—	202.2	1.5	**Svetozarevo** - Yugoslavia
—	202.2	2	**Novi Sad II**, Yugosl.
—	202.2	2	**Zagreb II** - Yugosl.
—	202.2	0.05	**16 low power** - Yugoslavia
—	202.2	2	**Pula** - Yugoslavia
—	202.2	2	**Ljubljana II** - Yugoslavia
—	202.2	2	**Celje** - Yugoslavia
—	202.2	1	**M. Sobota** - Yugosl.
—	202.2	2	**Tuzla** - Yugoslavia
—	202.2	2	**Bitola** - Yugoslavia
—	202.2	2	**Gostivar** - Yugosl.
—	202.2	0.15	**Kicevo** - Yugoslavia
—	202.2	0.15	**Kocani** - Yugoslavia
—	202.2	2	**Ohrid** - Yugoslavia
—	202.2	0.15	**Resen** - Yugoslavia
—	202.2	0.40	**Skopje II** - Yugosl.
—	202.2	0.15	**S. Jelsah** - Yugosl.
—	202.2	5	**Riga** - USSR
—	202.2	1	**Casablanca III**, Mor.
—	202.2	0.25	**AFRS** - Morocco
1489	201.4	0.02	**Hellissandur** - Icel.
—	201	0.05	**4 low power** - Aust.
1493	201	4	**Bayonne** - France
—	201	0.05	**5 low power** - Fr.
—	201	1	**Marseille III** - Fr.
—	201	1	**Strasbourg III** - Fr.
—	201	1	**Ajaccio** - France
—	201	1	**Besançon** - France
—	201	5	**Rhodos** - Greece
—	201	50	**Leningrad** - USSR
—	201	20	**Gomel** - USSR
—	201	2	**Dubrovnik** - Yugosl.
—	201	7	**Zagreb II** - Yugosl.
—	201	0.05	**Ludbreg** - Yugosl.
1500	200	0.2	**AFRS** - Azores
1502	199.7	0.25	**Garmisch (AFN)**, G
—	199.7	0.25	**Giessen (AFN)** - G
—	199.7	0.25	**Rothwesten (AFN)** -
—	199.7	0.25	**Wildflecken (AFN)**
—	199.7	2	**Asturias** - Spain
—	199.7	2	**Bilbao** - Spain
—	199.7	2	**Burgos** - Spain
—	199.7	2	**Ci. Real** - Spain
—	199.7	2	**Ibiza** - Spain
—	199.7	2	**Murcia** - Spain
—	199.7	2	**Pamplona** - Spain
—	199.7	2	**Salamanca** - Spain
—	199.7	2	**R. Vida** - Spain
—	199.7	0.8	**Münster (WDR)**, G
—	199.7	500	**Warszawa III** - Pol.
—	199.7	0.05	**Slovenj Gradec** - Yugoslavia
1510	198.5	0.02	**3 low power** - Icel.
1511	198.5	20	**Brussels III** - Belg.
—	198.5	250	**Berlin** - Germany
—	198.5	0.2	**Patras** - Greece
—	198.5	5	**Chania** - Greece
—	198.5	0.05	**Ptuj** - Yugoslavia
1520	197.4	30/2	**CS I** - Czecho.
—	197.4	0.02	**Reydarfjörd** - Icel.
—	197.4	2	**R. Toledo** - Spain

kc/s	Metres	kW	Stations
1520	197.4	2	**R. Gerona** - Spain
—	197.4	2	**R. Lérida** - Spain
—	197.4	2	**R. Alicante** - Spain
—	197.4	1.7	**R. Alcira** - Spain
—	197.4	2	**R. Albacete** - Spain
—	197.4	5	**R. Vigo** - Spain
—	197.4	1	**R. Jerez** - Spain
—	197.4	2	**R. Jaen** - Spain
—	197.4	1	**R. Lugo** - Spain
—	197.4	1	**R. Melilla** - Spain
—	197.4	5	**R. Miramar** - Spain
—	197.4	0.05	**Petrinja** - Yugosl.
1529	196.2	0.075	**Porjus** - Sweden
—	196.2	100	**Vatican Radio**
—	196.2	0.3	**Funchal, Madeira I.**
1538	195	300	**Mainflingen (D.funk) - G**
1545	194.2	0.02	**Stödvarfjörd** - Icel.
1546	194	0.05	**5 low power** - Aust.
—	194	0.25	**Bournemouth** - Gt. Br.
—	194	0.25	**Dundee** - Gt. Br.
—	194	0.25	**Exeter** - Gt. Br.
—	194	0.25	**Stockton** - Gt. Br.
—	194	1	**Brighton** - Gt. Br.
—	194	1	**Fareham** - Gt. Br.
—	194	1	**Leeds** - Gt. Br.
—	194	1	**Liverpool** - Gt. Br.
—	194	1	**Preston** - Gt. Br.
—	194	1	**Plymouth** - Gt. Br.
—	194	1	**Redrouth** - Gt. Br.
—	194	1	**Swansea** - Gt. Br.
—	194	5	**Seelow (DDR)** - G
—	194	50	**Vinnitsa** - USSR
1554	193.1	60	**Nice I** - France
—	193.1	20	**Baranovitchi**, USSR
—	193.1		**Turi** - USSR
1562	192.1	0.05	**Obdach** - Austria
1562	192.1	1.25	**Amalias** - Greece
—	192.1	1	**Colvilha** - Portugal
—	192.1	2	**Borås** - Sweden
—	192.1	0.5	**Eskilstuna** - Sweden
—	192.1	2	**Halmstad** - Sweden
—	192.1	2	**Kalmar** - Sweden
—	192.1	1.5	**Karlstad** - Sweden
—	192.1	0.5	**Kiruna** - Sweden
—	192.1	2	**Malmö** - Sweden
—	192.1	1.5	**Norrköping** - Sw.
—	192.1	0.06	**Söderhamn** - Sw.
—	192.1	0.5	**Uddevalla** - Sweden
—	192.1	2	**Uppsala** - Sweden
1562	192.1	2	**Varberg** - Sweden
—	192.1	0.5	**Örebro** - Sweden
—	192.1	1.5	**Örnsköldsvik** - Sw.
—	192.1	0.5	**Basel** - Switzerl.
—	192.1	0.5	**Coire** - Switzerl.
—	192.1	0.5	**Sool** - Switzerland
—	192.1	0.05	**Brezice** - Yugoslavia
1570	191.1	5	**Kiel (NDR)** - G
—	191.1	5	**Osnabrück (NDR)**
—	191.1	20	**Bernburg (DDR)**, G
—	191.1	1	**Voz Valladolid** - Sp.
—	191.1	2	**Voz Léon** - Spain
—	191.1	2	**Voz Alicante** - Sp.
—	191.1	1	**Voz Alava** - Spain
—	191.1	5	**Voz Levante** - Sp.
—	191.1	5	**Voz Guipuzcoa** - Sp.
—	191.1	2	**Voz Cantabria** - Sp.
—	191.1	1.5	**Voz Andalusia** - Sp.
—	191.1	2	**R. Tortosa** - Spain
—	191.1	3	**Voz Mancha** - Spain
—	191.1	2	**Voz Gerona** - Spain
—	191.1	3	**R. Marbella** - Spain
—	191.1	3	**Voz Lerida** - Spain
—	191.1	2	**Voz del Miño** - Sp.
—	191.1	2	**R. J. Béjar** - Spain
—	191.1	0.25	**Heraklion** - Greece
—	191.1	10	**Moscow II** - USSR
—	191.1	0.05	**Vrbovsko** - Yugosl.
—	191.1	0.025	**1 low power** - Turk.
—	191.1	1	**Santa Maria** - Azor.
1574	190.6	2	**Albacete** - Spain
—	190.6	2	**Soria** - Spain
1578	190.1	2	**Verano** - Italy
—	190.1	0.1	**Gorizia** - Italy
—	190.1	0.25	**La Spezia** - Italy
—	190.1	0.1	**Carrara** - Italy
—	190.1	1	**Perugia** - Italy
—	190.1	0.1	**Terni** - Italy
—	190.1	2	**Ancona** - Italy
—	190.1	1	**Aquila** - Italy
—	190.1	1	**Campob.** - Italy
—	190.1	0.1	**Brindisi** - Italy
—	190.1	0.04	**2 low power** - Italy
—	190.1	0.1	**Lecce** - Italy
—	190.1	1	**Taranto** - Italy
—	190.1	1	**Matera** - Italy
—	190.1	1	**Potenza** - Italy
—	190.1	1	**Catanzaro** - Italy
—	190.1	1	**Cosenza** - Italy
—	190.1	1	**Agrigento** - Italy
—	190.1	1	**Nuoro** - Italy
1578	190.1	1	**Sassari** - Italy
—	190.1	10	**Porto** - Portugal
—	190.1	10	**Fredrikstad** - Nor.
—	190.1	1.3	**Nordkapp** - Norway
1586	189.1	400	**Langenberg (WDR)**
1590	188.7	0.05	**2 low power** - Turk.
1594	188.2	0.05	**3 low power** - Aust.
—	188.2	5	**Bredene** - Belgium
—	188.2	1/0.2	**Isle of Man** - Gt. Br.
—	188.2	15	**Miskolc** - Hungary
—	188.2	0.4	**Magyaróvár** - Hung.
—	188.2	15	**Balatonszab** - Hung.
—	188.2	0.6	**Bougie** - Algeria
—	188.2	2	**Esbjerg** - Denmark
—	188.2	1	**Nimes** - France
—	188.2	0.05	**6 low power** - Fr.
—	188.2	2.5	**Hengelo** - Holland
—	188.2	2.5	**Hoogezand** - Holl.
—	188.2	2.5	**Hulsberg** - Holland
—	188.2	1	**AFRS** - Libya
—	188.2	2	**Ostrava** - Czech.
—	188.2	1	**Opole** - Poland
—	188.2	1	**Koszalin** - Poland
—	188.2	1	**Gizycko** - Poland
—	188.2	10	**Lisboa** - Portugal
—	188.2	1	**Athens (AFRS)**, Gr.
—	188.2	0.1	**AFRS** - Morocco
—	188.2	0.25	**AFRS** - Morocco
—	188.2	2	**Bolzano** - Italy
—	188.2	0.1	**Bressanone** - Italy
—	188.2	1	**Brunico** - Italy
—	188.2	1	**Merano** - Italy
—	188.2	2	**Trieste** - Italy
—	188.2	1	**Livorno** - Italy
—	188.2	1	**Cagliari** - Italy
—	188.2	0.15	**Boden** - Sweden
—	188.2	0.2	**Jönköping** - Sweden
—	188.2	0.15	**Kristinehamn** - Sw.
—	188.2	0.075	**Porjus** - Sweden
—	188.2	0.15	**Säffle** - Sweden
—	188.2	0.15	**Trollhättan** - Sw.
—	188.2	0.15	**Umeå** - Sweden
—	188.2	0.05	**8 low power** - Yugos.
—	188.2	5	**Benghazi** - Libya
—	188.2	1	**Marrakech** - Mor.
1602	187	20/40	**Nürnberg I (BR)**, G
—	187	20	**Land/Isar (BR)** - G
—	187	20	**Kirchheim (BR)**, G
—	187	1	**Hof (BR)** - Germ.
—	187	1	**Coburg (R)** - Germ.
—	187	1	**Regensburg (BR)**, G

Medium Wave Stations operating from International Waters:

kc	m	kW	Name
845	355.0	55	Britain Radio
1034	290.1	20	Radio City
1115	269.1	11	Radio 270
1133	264.8	75	Radio London
1169	256.6	20	Radio Caroline
1187	252.7	50	Radio Caroline
1259	238.3	20	Radio Scotland
1322	226.9	55	Radio Dolfijn
1349	222.4	1.75	Radio Essex
1520	197.4	20	Radio Caroline
1562	192.1	5	Radio Veronica

CALL SIGN ALLOCATIONS

(continued from page 274)

YKA-YKZ	Syria	2AA-2ZZ	U.K.
YLA-YLZ	USSR (Latvia	3AA-3AZ	Monaco
YMA-YMZ	Turkey	3BA-3FZ	Canada
YNA-YNZ	Nicaragua	3GA-3GZ	Chile
YOA-YRZ	Rumania	3HA-3UZ	China
YSA-YSZ	El Salvador	3VA-3VZ	Tunisia
YTA-YUZ	Yugoslavia	3WA-3WZ	Vietnam
YVA-YYZ	Venezuela	3XA-3XZ	Guinea
YZA-YZZ	Yugoslavia	3YA-3YZ	Norway
ZAA-ZAZ	Albania	3ZA-3ZZ	Poland
ZBA-ZJZ	British overseas terr.	4AA-4CZ	Mexico
		4DA-4IZ	Philippines
ZKA-ZMZ	New Zealand	4JA-4IZ	USSR
ZNA-ZOZ	British overseas terr.	4MA-4MZ	Venezuela
		4NA-4OZ	Yugoslavia
ZPA-ZPZ	Paraguay	4PA-4SZ	Ceylon
ZQA-ZQZ	British overseas terr.	4TA-4TZ	Peru
		4UA-4UZ	U.N.
ZRA-ZUZ	So. Africa	4VA-4VZ	Haiti
ZVA-ZZZ	Brazil	4WA-4WZ	Yemen
		4XA-4XZ	Israel
		4YA-4YZ	Int. Civil Aviation Org.
		4ZA-4ZZ	Israel
		5AA-5AZ	Algeria
		5BA-5BZ	Cyprus
		5CA-5GZ	Morocco
		5IIA-5IZ	Tanzania
		5JA-5KZ	Colombia
		5LA-5MZ	Liberia
		5NA-5OZ	Nigeria
		5PA-5QZ	Denmark
		5RA-5SZ	Malagasy
		5TA-5TZ	Mauritania
		5UA-5UZ	Niger
		5VA-5VZ	Togo
		5WA-5WZ	We. Samoa
		5XA-5XZ	Uganda
		5YA-5ZZ	Kenya
		6AA-6BZ	UAR
		6CA-6CZ	Syria
		6DA-6JZ	Mexico
		6KA-6NZ	Korea Rep.
		6OA-6OZ	Somalia
		6PA-6SZ	Pakistan
		6TA-6UZ	Sudan
		6VA-6WZ	Senegal
		6XA-6XZ	Malagasy
		6YA-6YZ	Jamaica
		6ZA-6ZZ	Not allocated
		7AA-7IZ	Indonesia
		7JA-7NZ	Japan
		7OA-7QZ	Not allocated
		7RA-7RZ	Algeria
		7SA-7SZ	Sweden
		7TA-7YZ	Algeria
		7ZA-7ZZ	Saudi Arabia
		8AA-8IZ	Indonesia
		8JA-8NZ	Japan
		8OA-8RZ	Not allocated
		8SA-8SZ	Sweden
		8TA-8YZ	India
		8ZA-8ZZ	Saudi Arabia
		9AA-9AZ	San Marino
		9BA-9DZ	Iran
		9EA-9FZ	Ethiopia
		9GA-9GZ	Ghana
		9HA-9JZ	Not allocated
		9KA-9KZ	Kuwait
		9LA-9LZ	Sierra Leone
		9MA-9MZ	Malaysia
		9NA-9NZ	Nepal
		9OA-9TZ	Congo (Kinshasa)
		9UA-9UZ	Burundi
		9VA-9WZ	Not allocated
		9XA-9XZ	Rwanda Rep.
		9YA-9ZZ	Not allocated

SHORT WAVE STATIONS OF THE WORLD

compiled by Tor-Henrik Ekblom.

*Standard Frequency Station. **Time Signal Station. Br.=Brazil, Cl.=Cultura, Col.=Colombia, Czecho.=Czechoslovakia, Ger.=Germany, Guat.=Guatemala, Hon.=Honduras, Isl.=Island, Venez.=Venezuela.

People of China freq's are omitted from this list. All freq's are shown on page 157.

kc	m	kW	Call	Stations & Countries	Rem.
2130	140.9	0.5	ZYV30	R.Dif. Brasileira, Brazil	
2160	139.39	0.25	XEVJ	Chipancingo, México	
2246	133.6	4		St. Denis, Réunion	
2312	129.8	2	YDB	Djakarta, Indonesia	
2326	129.5	20		Paradys, So. Africa	
2340	128.4	0.2	TGRW	S. Cruz Barillas, Guatemala	
	128.4	1	YVPL	R. Nueva Esparta, Venezuela	
2346	128.2	20		Paradys, So. Africa	
2350	127.6	1	YDJ3	Jogjakarta, Indonesia	
	127.6	1	YDW	Pontianak, Indonesia	
	127.6	0.5	TGSC	Voz Candelaria, Guatemala	
	127.8	1	ZYB	R.Dif. Itacoatiara, Brazil	
	127.6	1	YVPH	R. Gaurico, Venezuela	
2355	127.4	2.5		Lusaka, Zambia	
2360	127.1	0.25	TGRA	R. Maya Barillas, Guatemala	
	127.1	0.25		R.Dif. Parintins, Brazil	
	127.1	1		R. Cultura Carauru, Brazil	
	127.1	0.5	YVQG	R. Carupano, Venezuela	
2370	126.6	1	YDI3	Surabaja, Indonesia	
	126.6	1	YVQP	R. Puerto La Cruz, Venezuela	
2376	126.3	20		Paradys, So. Africa	
2380	126.0	0.35	XESE	México City, Mexico	
	126.0	0.25		R. Educ. Limeira, Brazil	
2390	125.5	1	YDN	Kotaradja, Indonesia	
	125.5	1	YDA6	Tjirebon, Indonesia	
	125.5	0.5	XEJN	México City, Mexico	
	125.5	0.5	ZYV71	R. Mundo Melhor, Brazil	
2400	125.0	0.1		R. Mossoró, Brazil	
	125.0	0.5		R.Dif. Amparo, Brazil	
	125.0	0.5	ZYW32	R. Carajá, Brazil	
	125.0	1	YVRS	R. Zaraza, Venezuela	
2410	124.5	0.25	VL9CG	R. Goroka, New Guinea	
	124.5	0.25	4VU	R. Lumière, Haiti	
	124.5	1		R. Em. Educ. Rural, Brazil	
	124.5	1		R. Sirena Brazil	
2420	124.0	0.25	YDU7	Singaradja, Indonesia	
	124.0	0 5		R. São Carlos, Brazil	
	124.0	0.25		R. Carolina, Brazil	
2422	123.9	0.25	YDA2	Bandung, Indonesia	
2430	123.5	1	YDK2	Palembang, Indonesia	
	123.5	1	YVPM	Esc. Radiofonicas, Venezuela	
2440a	122.9			Galei Zahal, Israel	
	122.9	1	YVLG	R. Girardot, Venezuela	
2450	122.5			Surakarta, Indonesia	
	122.5	0.25	VL9CH	R. Mt. Hagen, New Guinea	
	122.5	0.25	4VSO	R. 4VEH, Haiti	
	122.5	0.5	ZYR231	Cultura de Aracatuba, Brazil	
	122.5	0.35	HCWN1	La Voz del Triunfo, Ecuador	
	122.5	1	YVOX	R. Los Llanos, Venezuela	
2455	122.2	10		Lusaka, Zambia	
2460	121.9	2	YDB1	Djakarta, Indonesia	
	121.9	0.5	ZYR99	R. Cacique, Brazil	
	121.9	0.45	HCRT6	R. Paz y Bien, Ecuador	
2470	121.5	2	HCVA4	Estación de la Alegria, Ec.	
	121.5	0.2	YVNI	R. Carora, Venezuela	
2480	121.0	1	YDL	Padang, Indonesia	
	121.0	1	ZYR	R. Bragança, Brazil	
	121.0	0.35	HCGB4	R. Nacional Espejo. Ecuador	
	121.0	1	YVPD	La Voz de Avila, Venezuela	
2485	120.7			Purwokerto, Indonesia	
2490	120.5	0.3	YDK6	Djambi, Indonesia	
	120.5	0.3	YDQ	Makassar, Indonesia	
	120.5	0.3	YDH	Semarang, Indonesia	
	120.5	0.45	HCHW2	R. Rey, Ecuador	
	120.5	1	YVRY	R. Litoral, Venezuela	
*2500	120	0.5	MSF	Teddington, Gt. Britain	
*	120	1	OMA	Praha, Czechoslovakia	
*	120	5	FFH	Bagneux, France	
*	120	2	JJY	Tokyo, Japan	
*	120	0.3	ZLFS	Lower Hutt, New Zealand	
*	120	2.5	WWV	Lanham, USA	
*	120	1	WWVH	Lanham, USA	
2510	119.5	10	HLK50	Seoul, Korea	
**2614	114.8	2	DAN	Norddeich, Germany	
2635	113.9	0.3		Seoul (VUNC), Korea	
**2775	108.1	2	DAO	Kiel, Germany	
2850	105.3	5/50		Pyongyang, Korea (Dem. R.)	
*3170	94.06	8	OLB5	Praha, Czechoslovakia	
3202	93.69	2		Bangkok, Thailand	
3204	93.64	10		Ibadan (NBC), Nigeria	
3205	93.60	10		AIR. Lucknow, India	
	93.60	10	YDA	Bandung, Indonesia	
	93.60	0.5	HIAU	Voz de la Libertad, Dom. Rp.	
	93.60	1	YVRV	R. Litoral, Venezuela	
3210	93.44	1.5		St. Denis, Reunion	
3214	93.35	50		Kabul, Afghanistan	
3215	93.30	3/5	BED59	Taipei (BCC), Taiwan	
	93.30	0.25	HCLP3	Voz del Oro, Ecuador	
	93.30	1	YVOE	Ondas Panamericanas, Venez.	
3220	93.17	5/100		R. Clube de Moçambique	
	93.17	1.5	HCRE1	R. Nacional Espejo, Ecuador	
3222	93.10	30		R. Mauritania, Mauritania	
	93.10	5		Tsanagur, Mongolia	
3223	93.09	2.5		AIR Simla, India	
	93.09	1	YDF5	Mataram, Indonesia	
	93.09			Male Sinicor, Maldive Isl.	
3225	93.05	10		R. St. ELWA, Liberia	
3230	93.00	1	BED31	Taipei (BCC), Taiwan	
	93.00	10	VRH8	Suva, Fiji, Islands	
	93.00	0.4	OBX7D	R. El Sol, Peru	
3232	92.82	1.5		R. Brazzaville, Congo	
	92.82	30		Tananarive, Malagasy Rep.	
3235	92.74	10		AIR Gauhati, India	
	92.74	1	YVPP	R. Frontera, Venezuela	
3240	92.59	1.3/20		Accra, Ghana	
	92.59	0.3		Beira, Moçambique	
	92.59	50		Baghdad, Iraq	
	92.59	0.2	HCJC1	R. Atuntaqui, Ecuador	
	92.59	1	OBX4U	R. América, Peru	
	92.59	0.05		R. Nickerie, Surinam	
3241	92.56	10	YDR3	Ambon, Indonesia	
	92.56	1	YDM7	Sibolga, Indonesia	
3241	92.53	25		R. Abidjan, Ivory Coast	
3245	92.45	0.25	VL8BK	R. Kerema, New Guinea	
	92.45	0.5	HIAP	R. Monte Cristi, Dom. Rep.	
	92.45	1	YVKT	R. Libertador, Venezuela	
3250	92.31	20		Paradys, So. Africa	
	92.31	1	YDO	Bandjarmasin, Indonesia	
	92.31	0.4	OAZ4G	R. La Oroya, Peru	
	92.31	10	HJGO	Acción Cult. Popular, Col.	
3251	92.28	5		R. Tanzania, Tanzania	
3255	92.16	10	ELBC	Liberian Bc. Corp. ,Liberia	
	92.15	0.5	ZYN62	R. Cl. de Marilia, Brazil	
	92.15	1	YVQL	La Voz del Tigre, Venezuela	
3259	92.05	5	YDV	Kupang, Indonesia	
	92.05	20		R. Malaysia, Sarawak	
3260	92.02	4		R. Niger, Niger	
	92.02	10	HJGW	Acción Cult. Popular, Col.	
3264	91.90	4		R.TV. Congolaise, Congo	
3265	91.87	5/100		R. Clube de Moçambique	
	91.87	0.25	ZK6	R. Rarotonga, Cook Isl.	
	91.87	1	HIRM	R. Sol, Dom. Rep.	
	91.87	4	ZYR92	R. Ribeirão Preto, Brazil	
	91.87	1	ZYK21	R. Tamandaré, Brazil	
	91.87	2	ZFY	R. Demerara, Br. Guinea	
	91.87	0.2	HCMZ6	La Voz del Rio Chimbo,Ecuad.	
	91.87	1	YVOC	R. Nirgua, Venezuela	
3268	91.78			AIR Kohima, India	
	91.78	1		R. Timor, Timor	
3270	91.75	4		R. Dahomey, Dahomey	
	91.75	120		Lusaka, Zambia	
3275	91.60	10	CR6RZ	R. Angola, Angola	
	91.60	1	ZYR31	Bauru R. Clube, Brazil	
	91.60	0.2	HCVU2	Voz Urdaneta, Ecuador	
	91.60	1	YVMC	R. Mara, Venezuela	
3277	91.55			R. Kashmir, India	
	91.55	7.5	YDD	Djakarta, Indonesia	
	91.55	1	YJB3	Port Vila, New Hebrides	
3280	91.40	10/20		Accra, Ghana	
	91.40	5		Grenada, Windward Islands	
	91.40	1	OBX1E	R. San Miguel, Peru	
3284	91.35	10	VRH9	Suva, Fiji Islands	

kc	m	kW	Call	Stations & countries	Rem.
3285	91.32	20		Paradys, So. Africa	
	91.32	1	ZYR89	R. Aparecida, Brazil	
	91.32	1		Emis. Educ.Rural, Brazil	
	91.32	1	YVLE	R. Puerto Cabello, Venezuela	
3286	91.26	1	YDG6	Madiun, Indonesia	
	91.26	5	DUB4	Philipp.Bc.Sce, Philippines	
3288	91.24	30		Tananarive, Malagasy Rep.	
3290	91.19	25	HJAB	R. Nacional, Colombia	
	91.19	0.5	OBZ4E	R. Universal, Peru	
3295	91.05	10/100	VUB	AIR Bombay, India	
	91.05	10/100	VUD	AIR Delhi, India	
	91.05	0.5	ZYV75	R.Educ.de Uberlandia,Brazil	
	91.05	1	YVOG	R. Trujillo, Venezuela	
3300	90.91	5		Belize, Honduras (BR.)	
	90.91	0.45	OBX4Y	R. Junin, Peru	
3304	90.80	10	VL8BD	R. Daru, New Guinea	
3305	90.77	7.5		Benghazi, Libya	
	90.77	0.25/10	VUC	AIR Calcutta, India	
	90.77	0.3	YDM4	Bukittingi, Indonesia	
	90.77	1	DZCA	NCDAF, Philippines	
	90.77	1	ZYH31	R. Educ. do Cairiri, Brazil	
	90.77	1	YVKX	LaVozdelaPatria, Venezuela	
3306	90.73	10		Gwelo, Rhodesia	
3308	90.70	1.5	HCHA2	Ondas Quevedañas, Ecuador	
3315	90.50	10		AIR Bhopal, India	
	90.50		YD13	Djember, Indonesia	
	90.50	4		R. Martinique, Martinique	
	a90.50			R. Gazeta de Alagoas, Brazil	
	90.50	0.5	ZYV63	R. Itatiaia, Brazil	
	90.50	1	YVLI	R Maracay, Venezuela	
3316	90.46	5/10		Freetown, Sierra Leone	
3319a	90.38		HCHA2	Ondas Quevedañas, Ecuador	
3320	90.34	20		Paradys, So.Africa	
	90.34	5/50		Pyongyang, Korea(Dem.Rep.)	
	90.34	1	OBZ4I	R. Erpa, Peru	
3325	90.23		YDZ7	Palankaraya, Indonesia	
	90.23	10	8FW34	Sukarnopura, Indonesia	
	90.23	2	ZYJ21	R. Borborema, Brazil	
	90.23	0.1	ZYR208	R. Dif.Guarulhos, Brazil	
	90.23	0.5	OAX3P	R. Tingo Maria, Peru	
	90.23	5	YVRA	R. Monagas, Venezuela	
3326	90.20	7.5		Kaduna(NBC), Nigeria	
**3330	90.09	3	CHU	Dominion Observatory, Can.	
	90.09	1	OAX1M	R. Progreso, Peru	
3331	90.06	4		Dzaoudzi, Comores Isl.	
3335	89.95	10	VL9CD	R.Wewak,Papua&NewGuin.	
	89.95	10	BED20	Taipei(BCC), Taiwan	
	89.95	0.5	ZYR59	R.Pres.Prudente, Brazil	
	89.95	1	ZYE21	R. Marajoará, Brazil	
	89.95	1	YVQC	R. Cumaná, Venezuela	
3336	89.95	4		Ziguinchor, Sénegal	
3339	89.85	10		R. Tanzania, Zanzibar	
3340	89.81	5/100		R. Clube de Moçambique	
	89.81	3/8		Kampala, Uganda	
	89.81	1	CP99	R. Viloco, Bolivia	
	89.81	0.3	HCJT1	R. Tulcan, Ecuador	
3345	89.68	2		R. Kashmir, India	
	89.68		8FW40	Fak Fak, Indonesia	
	89.68	5	YDW2	Pontianak, Indonesia	
	89.68	2	DZB2	Call of the Orient, Philipp.	
	89.68	1	HIAS	Onda Musical, Dom.Rep.	
	89.68	1		R. Alvorada, Brazil	
	89.68	1	YVPE	R. Central, Venezuela	
3346	89.68	20		Lusaka, Zambia	
3350	89.55	1.3/20		Accra, Ghana	
	89.55	1	CP103	R.27 de Diciembre, Bolivia	
	89.55	1	OAX5J	R. Independencia, Peru	
3355	89.42	0.25		Nampula, Moçambique	
	89.42	10		AIR Hyderabad, India	
	89.42	7.5		AIR Kurseong, India	
	89.42	1	YDI20	Sumenep, Indonesia	
	89.42	4		R. Nouméa, New Caledonia	
	89.42	0.25	HIBD	Voz Romana, Dom. Rep.	
	89.42	0.2	HCDR4	R. Miramar, Ecuador	
	89.42	0.5	OAX3Q	R. Ondas de Huallaga, Peru	
	89.42	1	YVLC	R. Valencia, Venezuela	
3356	89.40	10	ZND	Gaberones, Botswana	
3360	89.29	0.2	TGVN	Voz Nahualá, Guatemala	
	89.29	0.5	OAX3D	R. Huánuco, Peru	
3365	89.15	0.25		Nampula, Moçambique	
	89.15	10/100	VUD	AIR Delhi, India	
	89.15	0.25	8FW5	Manokwari, Indonesia	
	89.15	0.5	HIRL	R. Exitos, Dom. Rep.	
	89.15	0.5	ZYS45	R. Dif. do Paraná, Brazil	
	89.15	1	YVPM	R. Tovar, Venezuela	
3366	89.12	20		Accra, Ghana	
3370	89.02	4		R. Université, Malagasy Rep.	
3370	89.02	0.5	CP85	R. Universidad, Bolivia	
3372	88.96	20		Ulgei, Mongolia	
	88.96	0.25	HCDY4	R. Iris, Ecuador	
3375	88.89	0.25		Porto Amelia, Moçambique	
	88.89	10		AIR Gauhati, India	
	88.89	1	YDK7	Djambi, Indonesia	
	88.89	10	CR6RZ	R. Angola, Angola	
	88.89	1	HIAD	R. San Juan, Dom. Rep.	
	88.89	10	ZYK28	R. Olinda Pernambuco, Brazil	
	88.89	0.5	YVMI	La Voz de la Fé, Venezuela	
3376	88.86	50		Conakry, Guinea	
3380	88.76	10		Blantyre, Malwia	
	88.76	10		Ibadan(WNBS), Nigeria	
	88.76	1	TGCH	Esc.Radiof.Shortis,Guatema.	
	88.76	1	OAX1O	R. Chiclayo, Peru	
3385	88.63	50		Conakry, Guinea	
	88.63	0.5	8FW50	Biak, Indonesia	
	88.63	5		Kupang, Indonesia	
	88.63	10	VL9BR	R. Rabaul, New Guinea	
	88.63	1	HIDA	R. Hit Musical, Dom.Rep.	
	88.63	0.5		R. Clube Teresina, Brazil	
	88.63	4		Cayenne, Fr. Guiana	
	88.63	1	OBZ4M	R.LaVozdelValleMontaro,P.	
	88.63	1	YVQI	R. Barcelona, Venezuela	
3390	88.50	1	9Q2AC	R. Collège, Congo	
	88.50	0.2	HCOTI	R. Zaracay, Ecuador	
	88.50	0.3	OCX4R	R.Inst.Industrial, Peru	
3395	88.37	1	YDP2	Medan, Indonesia	
	88.37	0.1		Purwokerto, Indonesia	
	88.37	0.5	8FW20	Sorong, Indonesia	
	88.37	1	HIAZ	R. Santiago, Dom. Rep.	
	88.37			R. Dif. Goiania, Brazil	
	88.37	1		R.Tapuyo de Mossoró, Brazil	
	88.37	0.35	PZX4	R. Suriname, Surinam	
	88.37	1	YVOJ	R. Universidad, Venezuela	
3396	88.34	10		Kaduna(NBC), Nigeria	
	88.34	20		Gwelo, Rhodesia	
3435a	87.34			Ondas de Huallaga, Peru	
3440	87.21	0.3		Purwokerto, Indonesia	
3465	86.58	1		Pakanbaru, Indonesia	
3515	85.35	0.2	HCKD5	R.Centro Gualaceo, Ecuador	
3520	85.23	0.2	HCYC4	R.Escuelas Radiales, Ecuador	
3615	82.99	0.4	HCGS6	R. Pillaro, Ecuador	
3695	81.12	0.5	HCIE1	R. Cotacachi, Ecuador	
3704	80.99	1	CR6RD	Nova Lisboa, Angola	
3740	80.21	0.75	CR6RM	Moçamedes, Angola	
3755	79.90	0.4	HCBH6	R. Latacunga, Ecuador	
3824	78.46	0.1	ZNF4V	Maseru, Lesotho	
3870	77.52			R. Iran, Iran	
3883	77.25	0.5/5	CR4AA	R.Cl.CaboVerde,CapeV.Isl.	
3890	77.12	0.5	OAX3G	R. Chimbote, Peru	
3905	76.83	10/100	VUD	AIR Delhi, India	
	76.83	0.5	YJB4	Port Vila, New Hebrides	
3910	76.73	1	CR4AC	R.Barlavento,Cape V. Isl.	
	76.73	5	HLK5I	Seoul, Korea	
	76.73	10/1		Tokyo(FEN), Japan	
3915	76.64	15/100		BBC London, Gt.Britain	
	76.64	1	YDZ2	Ternate, Indonesia	
	76.64	7.5/100		BBC, Malaysia	
	76.64	10		Quetta, Pakistan	
3925	76.43	10/100	VUD	AIR Delhi, India	
	76.43	50	JOZ	Tokyo, Japan	
	76.43	10	VLK3	Port Moresby, Australia	
3935	76.24	0.4		Suva, Fiji Islands	
3940	76.15	2.5	ZBW3	R. Hong Kong	
	76.15	10		Peshawar, Pakistan	
3945	76.05	1	YDU2	Denpassar, Indonesia	
	76.05	10	JOZ4/5	Sapporo/Tokyo, Japan	
	76.05	0.5	DXB3	Cotabato, Philippines	
3950	75.95	1		Lahore, Pakistan	
	75.95	0.3	HCZP1	R. Rumichacha, Ecuador	
3952	75.90	15/100		BBC London, Gt. Britain	
3958	75.78	0.5		Stanley, Falkland Isl.	
3960	75.76	10/100/250		R. Free Europe, Germany	
	75.76	0.5/5		R. Pax, Moçambique	
	75.76	10	YDL2	Padang, Indonesia	
	75.76	0.5	OAX7O	R. Madre de Dios, Peru	
3965	75.67	0.3	HCJH1	R. Turismo, Ecuador	
3970	75.57	10/100/250		R. Free Europe, Germany	
	75.57	1	CR6SG	R. Clube Huila, Angola	
3975	75.47	15/100		BBC London, Gt. Britain	
	75.47	0.25	CR6RF	R.Cl. de Benguela, Angola	
	75.47	1	YDI6	Djember, Indonesia	
	75.47	10	YDI	Surabaja, Indonesia	
	75.47	0.6	HCSN6	R. Sira, Ecuador	
3980	75.38	8		Munich(VOA), Germany	
	75.38	15		Baku, USSR	

kc	m	kW	Call	Stations & countries	Rem.
3980	75.38	10		Enugu(NBC). Nigeria	
	75.38	0.4		Suva, Fiji Islands	
3985	75.28	0.25	9UB92	R. Cordac, Burundi	
	75.28	0.25	8FW6	Merauke, Indonesia	
	75.28	0.3		Seoul (VUNC), Korea	
	75.28	1	HCER5	Esc.Radiofonica Pop, Ecuador	
3990	75.19	10/100/250		R. Free Europe, Germany	
	75.19	20/50		R. Liberty, Germany	
	75.19	50		Monrovia(VOA), Liberia	
	75.19	50		Baghdad, Iraq	
	75.19	1		AFNT, Taiwan	
3995	75.09	10/100/250		R. Free Europe, Germany	
	75.09	5/135		R. Budapest, Hungary	
	75.09	5		R. Roma, Italy	
	75.09	10		R.Comercial de Angola, Ang.	
	75.09	5	YDH2	Semarang, Indonesia	
	75.09	5	VQO4	Solomon Islands	
	75.09	0.5	HCJA5	La Voz del Rio Tarqui, Ecuad.	
3999	75.02	1.5		Godthåb, Greenland	
4008	74.81			Frunze, USSR	
**4025	74.50		GIC24	Hailsham, Gt. Britain	
4055	73.98			Petropavlovsk, USSR	
4070	73.73	25		Ulan-Bator, Mongolia	
4080	73.53			Semipalatinsk, USSR	
4085	73.44	50		Ulan-Bator, Mongolia	
4100	72.17			Kzyl Orda, USSR	
4165	72.03	50		Ulan-Bator, Mongolia	
**4265	70.34	5	DAM	Elmshorn, Germany	
**4286	70.00	10	VHP2	Belconnen, Australia	
4310	69.61			Chimkent, USSR	
4355	69.89			Nukus, USSR	
4405	68.10			Khabarovsk, USSR	
4430	67.72			Novosibirsk; USSR	
**4478	67.00		VHP4	Belconnen, Australia	
**	67.00		VIX4	Sydney, Australia	
4485	66.89			Petropavlovsk, USSR	
4500	66.67	0.4		R. Shiraz, Iran	
4510	66.52			Andizhan, USSR	
4520	66.37			Khanty Manziysk, USSR	
**4525	66.25	5	DIZ	Nauen, G.D.R.	
4544	66.00			Alma Ata, USSR	
4560	65.79			Guryev, USSR	
4570	65.65			Petropavlovsk, USSR	
4600	65.22	5	9NB7	R. Nepal, Nepal	
4610	65.08			Khabarovsk, USSR	
4620	64.94	1		Rajsima, Thailand	
4635	64.72			Dushanbe, USSR	
4640	64.66	1	HSK24	R. Thailand, Thailand	
4665	64.30			Baku, USSR	
4684	64.05			Hanoi, Vietnam(Dem. Rep.)	
4705a	63.76			Emisora Mariana, Colombia	
	63.76	1	HCAK2	R.Dif.del Ecuador, Ecuador	
4710	63.69	1	ZYF24	R. Dif. Maranhão, Brazil	
4715	63.56	0.25/0.45	CR4AB	R.Cl. Mindelo, Cape Verde I.	
4735	63.35	1.5	ZYY3	R. Brasil, Brazil	
4750	63.16	10		Lubumbashi, Congo Dem. Rp.	
	63.16	0.25	HCBK2	R. El Mundo, Ecuador	
4753	63.12	20		Makassar, Indonesia	
4755	63.09	0.5	HS2PN	Wat Liang, Thailand	
	63.09	0.5	HRD4	R. Oriental, Honduras Rep.	
	63.09	2.5	HJIV	Reina de Colombia, Colombia	
	63.09	0.2	HCLJ6	Voz de Bolivar, Ecuador	
4756	63.08	10	VRH4	Suva, Fiji Islands	
4760	63.03			Dzambul, USSR	
	63.03	5/100		R. Clube de Moçambique	
	63.03	10/100	VUD	AIR Delhi, India	
	63.03	5	CP62	R. Bolivia, Bolivia	
	63.03	1	YVKV	Emis. Vargas, Venezuela	
4762	63.00	1	OCX4W	R. Inca, Peru	
4765	62.95	1		Manokwari, Indonesia	
	62.95	1	ZYN37	Feira de Santana, Brazil	
4770	62.89	0.5	CR6RG	R. Diamang, Angola	
	62.89	10		R. St. ELWA, Liberia	
	62.89	1		Paruskawan, Thailand	
	62.89	1	HIAS	Onda Musical, Dom. Rep.	
	62.89	1	HRLC	R. Continental, Honduras R.	
	62.89	0.4	HCMX4	R. Cenit, Ecuador	
	62.89	0.5	OAX2G	R. Cajamarca, Peru	
	62.89	1	YVNW	R. Bolivar, Venezuela	
4775	62.84	50		R. Afghanistan, Afghanistan	
	62.84	10		AIR Gauhati, India	
	62.84	7.5		Djambi, Indonesia	
	62.84	1	CP84	R. Los Andes, Bolivia	
	62.84	0.1	CP56	R. Onkoi, Bolivia	
	62.84	5	ZYH29	R. Dragão do Mar, Brazil	
	62.84	5	ZYR81	R. Progresso, Brazil	
	62.84	1	HJKW	La Voz de Maria, Colombia	
4775	62.84	0.2	HCEH3	R. El Progreso, Ecuador	
4777	62.80	30		R. Gabon, Gabon	
4780	62.76	4		R. Djibouti, Fr. Somaliland	
	62.76	1	HCMQ1	R. Atahualpa, Ecuador	
	62.76	1	YVLA	Voz de Carabobo, Venezuela	
4783	62.72	18		R. Mali, Mali	
	62.72	0.5		Bangkok, Thailand	
4785	62.70	30		R. Niger, Niger	
	62.70	10		R. Tanzania, Tanzania	
	62.70	10	VRH5	Suva, Fiji Islands	
	62.70	1	CP74	R. Indoamérica, Bolivia	
	62.70	0.5	ZYM8	R. Ribamar, Brazil	
	62.70	1	ZYY20	R. Cult. Caiari, Brazil	
	62.70	1	HJLW	Ecos Combéima, Colombia	
	62.70	1	OAX3V	R. Horizonte, Peru	
4790	62.63	10		R. Malaysia, Malaysia	
	62.63	1	HRST	R. Primero de Mayo, Hond.	
	62.63	0.25	HCAU2	R. Atalaya, Ecuador	
	62.63	0.4	OAX5X	R. Nazca, Peru	
	62.63	5	YVQN	Ondas Porteñas, Venezuela	
4795	62.57	10		R. Com. de Angola, Angola	
	62.57	4		R. Brazzaville, Congo	
	62.57	10		R. Tanzania, Zanzibar	
	62.57	50	XZK2	Rangoon, Burma	
	62.57	1	CP73	R. Nueva América, Bolivia	
	62.57	0.5	ZYP27	R. Copacabana, Brazil	
	62.57	2	PRI4	R. Tabajara, Brazil	
	62.57	1	HJFU	Voz del Comercio, Colombia	
	a62.57			Voz de los Caras, Ecuador	
4797	62.54	10		R. Somali, Somalia	
4800	62.50	10/100	VUD	AIR Delhi, India	
	62.50	10		AIR Hyderabad, India	
	62.50	0.25	HCSV5	R. Amazonas, Ecuador	
	62.50	0.5	OBX7C	R. Onda Azul, Peru	
	62.50	1	YVME	Ondas del Lago, Venezuela	
	62.50	10	YVMS	R. Universo, Venezuela	
4804	62.45	5		Kisumu, Kenya	
4805	62.43	50	YDB2	Djakarta, Indonesia	
	62.43	0.5		Sorong, Indonesia	
	62.43	5	ZYS8	R. Dif. do Amazonas, Brazil	
	62.43	0.5	HJAU	Universidad Antioquia, Col.	
4807	62.41	4		St. Denis, Réunion	
	62.41	1		R. Clube de São Tomé	
	62.41	1		Lahore, Pakistan	
4810	62.37	20		Paradys, So. Africa	
	62.37			Fak Fak, Indonesia	
	62.37	7.5/100		Dacca, Pakistan	
	62.37	50		Banmethout, Vietnam	
	62.37	0.3	HCFA4	Voz de Manabi, Ecuador	
	62.37	1	YVMG	R. Popular, Venezuela	
4815	62.31	25		Ouagadougou, Upper Volta	
	62.31	1	ZYP33	R. Icarema Fortaleza, Brazil	
	62.31	1	ZYR33	Petropolis R. Dif, Brazil	
	62.31	1	HJDD	R. Valledupár, Colombia	
	62.31	1	OAX8X	R. Amazonas, Peru	
	62.31	1	OAX5U	R. La Voz, Peru	
4820	62.24	10	CR6RZ	R. Angola, Angola	
	62.24	3.1		R. Gambia, Gambia	
	62.24	0.25/10	VUC	AIR Calcutta, India	
	62.24	1		Bandjarmasin, Indonesia	
	62.24	5	HRVC	R. Evangélica, Honduras Rep.	
	62.24	0.2	XEJG	Guadalajara, Mexico	
	62.24	0.45	OAX7K	R. Puno, Peru	
	62.24	1	YVRC	Voz de Apure, Venezuela	
4825	62.18			Ashkabad, USSR	
	62.18	1	CP70	R. Grigotá, Bolivia	
	62.18	0.5	ZYV57	R. Soc. Uberaba, Brazil	
	62.18	0.5	ZYE7	Educ. de Parnaiba, Brazil	
	62.18	1	HJHC	R. Nariño, Colombia	
	62.18	1		R. S. Eugenio Santa Rosa, C.	
	62.18	1	OAX8R	R. San José, Peru	
4830	62.11	5	HSKB	R. Thailand, Thailand	
	a62.11		CP70	R. Grigotá, Bolivia	
	62.11	0.5	HCJS1	Ondas del Angel, Ecuador	
	62.11	1	YVOA	Voz del Táchira, Venezuela	
4835	62.05	60		Erevan, USSR	
	62.05	18		R. Mali, Mali	
	62.05	20/10		R. Malaysia, Sarawak	
	62.05	0.5	ZYV56	R. Clube Varginha, Brazil	
	62.05	1	ZYA	R. Dif. Roraima, Brazil	
	62.05	1	HJAM	R. Buenaventura, Colombia	
	62.05		HCAP4	La Voz de Valle, Ecuador	
	62.05	0.35	OAX7T	R. Sicuani, Peru	
	62.05	0.5	OAZ4J	R. Sudamericana, Peru	
4839	61.99	10		R. Bukavu, Congo Dem. R.	
4840	61.98	1	CR6RY	Novo Redondo, Angola	
	61.98	10/100	VUB	AIR Bombay, India	

kc	m	kW	Call	Stations & countries	Rem.
4840	61.98		YSCB	La Voz del Pacifico, El Salv.	
	61.98	1	OAX8F	R. Atlántida, Peru	
	61.98	1	OBX4E	R. Andahuaylas, Peru	
	61.98	1	YVOI	R. Valera, Venezuela	
4843	61.95	25		R.TV Congolaise, Congo	
4845	61.92	10		Francistown, Botswana	
	61.92	10		R. Malaysia, Malaysia	
	61.92	0.5	HRVJ	R. Católica S. Isidro, Hond.	
	61.92	0.5	ZYU8	R. Dif. Teresina, Brazil	
	61.92	1	HJGF	R. Bucaramanga, Colombia	
	61.92	0.38	HCRM3	R. Cultural Machala, Ec.	
	61.92	1	OAX1X	Voz del Chira, Peru	
4849	61.87	30		R. Mauritania, Mauritania	
	61.87	2.5	PZX2	R. Suriname, Surinam	
4850	61.86			Tashkent, USSR	
	61.86	1	CR6RU	Carmona, Angola	
	61.86	10		Forest Side, Mauritius	
	61.86			AIR, Kohima, India	
	61.86			R. Recreo, Chile	
	61.86	0.25	HCCV3	Ondas del Zamora, Ecuador	
	61.86	10	YVKF	Ondas Populares, Venezuela	
4855	61.79	5		Nairobi, Kenya	
	61.79	5/100		R. Clube de Moçambique	
	61.79	10		Enugu (ENBS), Nigeria	
	61.79	10	YDK	Palembang, Indonesia	
	61.79	1	HRVA	R. Corona, Honduras Rep.	
	61.79	1	CP59	R. Cobija, Bolivia	
	61.79	1	ZYR61	R. Dif. de Taubaté, Brazil	
	61.79	1	HJGT	R. Neiva, Colombia	
	61.79	0.35	HCMA1	R. Marañon, Ecuador	
4859	61.74	5/100		R. Clube de Moçambique	
4860	61.73			Moscow, USSR	
	61.73	1	CR6RN	R. Clube de Angola, Angola	
	61.73	0.5	OCX4B	R. Callao, Peru	
	61.73	1	YVQE	R. Mundo, Venezuela	
4865	61.66	1	CSA97	Ponta Delgada, Azores	
	61.66	5/100		R. Clube de Moçambique	
	61.66	10		Brunei Bc.Sce, Brunei	
	61.66	10	YDR	Ambon, Indonesia	
	61.66	2.5	PRC5	R. Clube do Pará, Brazil	
	61.66	1	HCCD1	Luz de América, Ecuador	
4870	61.60	30		R. Dahomey, Dahomey	
	61.60	10		Colombo, Ceylon	
	61.60	0.3	HCGM7	Rio Amazonas, Ecuador	
	61.60	0.5	OCX4T	R.Obispado Huancayo Peru	
	61.60	5	YVKP	R. Tropical, Venezuela	
4872	61.58	5		Sorong, Indonesia	
	61.58	0.2	TGQH	R. Sta. Cruz, Guatemala	
4875	61.54	20		Paradays, So. Africa	
	61.54	0.6/10	YDG3	Surakarta, Indonesia	
	61.54	1	ZYZ30	R. Jornal do Brazil, Brazil	
	a61.54	1	HJDE	R. Villavicencio, Colombia	
	61.54	1	HJBG	La Voz del Norte, Colombia	
	61.54	3	HCVE4	La Voz Esmeraldas, Ecuador	
4876a	61.53			La Voz del Rio Cauca, Col.	
4877	61.52	20/60		Saigon, Vietnam	
4880	61.48	10		Kinshasa, Congo Dem. Rep.	
	61.48	10		AIR Lucknow, India	
	61.48	1	HIJP	R. Comercial, Dom. Rep.	
	61.48	0.5	HRQN	Voz de Atlantico, Honduras	
	61.48		HCWE1	R. Nac. Espejo, Ecuador	
	61.48	1	OCX4E	R. Once Sesenta, Peru	
	61.48	10	YVPA	R. Yaracuy, Venezuela	
4885	61.45	10		Nairobi, Kenya	
	61.45	0.5	CP105	R. Ibare, Bolivia	
	61.45	1.5	CP77	R. Sararenda, Bolivia	
	61.45	1	ZYD6	R. Acreana, Brazil	
	61.45	5	ZYN50	R. Cultura de Poços, Brazil	
	61.45	1	ZYG26	R. Pionera de Teresina, Brz.	
	61.45	1	HJIW	Voz del Centro, Colombia	
	61.45	1	OAX5V	R. Villarica, Peru	
4888	61.39	10		Bukavu, Congo (Dem. Rep).	
4890	61.35	25		Dakar, Senegal	
	61.35	1		Samarinda, Indonesia	
	61.35	10	VLT/K4	Port Moresby, Australia	
	61.35	1	HRVL	R. Lux, Honduras Rep.	
	61.35	5	YVKB	R. Dif. Venezuela, Venezuela	
4892	61.32	1		Cayenne, Fr. Guiana	
4894	61.31	60		Erevan, USSR	
4895	61.29	0.25		Quelimane, Moçambique	
	61.29	20/250		R. South Africa, So. Africa	
	61.29	7.5		Kurseong, Indonesia	
	61.29	4		R. Martinique, Martinique	
	61.29	1	PRF6	R. Baré, Brazil	
	61.29	1	ZYN23	R. Cultura de Bahia, Brazil	
	61.29	1	HJCH	La Voz de la Victor, Colombia	
	61.29	0.4	OAZ4T	R. Chanchamayo, Peru	

kc	m	kW	Call	Stations & countries	Rem.
4896	61.27	1	CR6RO	Silva Porto, Angola	
4900	61.22	10		Colombo, Ceylon	
	61.22	1		Gorontalo, Indonesia	
	61.22	10	YVNK	R. Juventud, Venezuela	
4904	61.18	30		R. Tchad, Chad	
	61.18	0.42	HCVS6	La Voz de Sasquisili, Ec.	
4905	61.16	1	CR6RS	Lobito, Angola	
	61.16	5	ZYZ20	R. Relogio Federal, Brazil	
	61.16	1	HJAG	Emis. Atlántico, Colombia	
4907	61.14	15		R. Cambodia, Cambodia	
4910	61.10	18		Conakry, Guinea	
	61.10	1	YDM2	Bukittinggi, Indonesia	
	61.10	10		Peshawar, Pakistan	
	61.10	1	HIN	R. HIN, Dom. Rep.	
	61.10	5	HCMJ1	Emis. Gran Colombia, Ec.	
	61.10	0.5	OAX2K	R. Libertad, Peru	
	61.10	10	YVPN	Esc. Radiofónicas, Venez.	
4911	61.08	20		Lusaka, Zambia	
4912	61.07	2	VTW2	Tarawa, Gilbert Islands	
4914	61.05	0.5	HRSY	Voz del Pacifico, Honduras	
4915	61.03	10/20		Accra, Ghana	
	61.03	10		Quetta, Pakistan	
	61.03	1	CP88	R. Amboro, Bolivia	
	61.03	1	ZYR60	Cultura de Araraquara, Brz.	
	61.03	2	ZYE2	R. Dif. de Macapá, Brazil	
	61.03	0.5	OAX2H	R. La Hora, Peru	
4916	61.03	0.3	HCAH3	R. El Trebol, Ecuador	
4920	60.98	0.5	9UB94	R. Cordac, Burundi	
	60.98	10	VUM	AIR Madras, India	
	60.98	10	VLM4	Brisbane, Australia	
	60.98	0.2	TGRY	V. San Raymundo, Guatem.	
	60.98	1	HRPL	R. Progreso, Honduras Rep.	
	60.98	1	HROM	R. Ulua, Honduras Rep.	
	60.98	0.2	HCMP2	Voz de la Peninsular, Ecuador	
	60.98	0.35	HCJX6	R. Cultural Rel, Ecuador	
	60.98	1	OBX7H	R. Ondas del Titicaca, Peru	
	60.98	7.5	YVKR	R. Caracas, Venezuela	
4923	60.94	12/6	HCRQ1	R. Quito, Ecuador	
4925	60.90	5/100		R. Clube de Moçambique	
	60.90	1	ZYL20	Emis. Rio Sao Francisco, Br.	
	60.90	1	ZYV32	R. Industria!, Brazil	
	60.90	1	ZYA6	R. Icarema, Brazil	
4926	60.90	5	EAJ206	R. Ecuatorial, Sp. Guinea	
4930	60.85			Batumi, USSR	
	60.85	0.15	YDX2	Tdj. Pinang, Indonesia	
	60.85	1	HRVS	R. Católica, Honduras Rep.	
	60.85	10	HCCR1	Casa de la Cultura, Ecuador	
	60.85	1	YVOT	R. Junín, Venezuela	
4934	60.80	10		Nairobi, Kenya	
	60.80	0.25	OAX5Q	R. Concejo Provincial, Peru	
4935	60.80	1	CR6RE	R. Cl. de Malanje, Angola	
	60.80	1	ZYI21	R. Potí, Brazil	
	60.80	1	HJDE	R. Villavicencio, Colombia	
	60.80	1	OAX9E	R. Tropical, Peru	
4940	60.73			Kiev, USSR	
	60.73	10		R. Abidjan, Ivory Coast	
	60.73	10		AIR Gauhati, India	
	60.73	1	HIBE	R. Mil, Dom. Rep.	
	60.73	0.2	TGRH	Rel. Humanas, Guatemala	
	60.73	0.5	4VM	R. Dif. Haitienne, Haiti	
	60.73	0.5	HRVN	R. Sonora, Honduras Rep.	
	60.73	10	HCXZ1	R. Dif. Nacional, Ecuador	
	60.73	0.5	OAX6N	R. Misti, Peru	
	60.73	0.5	OAZ4R	R. San Juan, Peru	
	60.73	10	YVMO	R. Lara, Venezuela	
4942	60.72		YDA3	Bandung, Indonesia	
4944	60.71	60		Erevan, USSR	
4945	60.67	20		Paradys, So. Africa	
	60.67	20		Omdurman, Sudan	
	60.67	0.5	DZB6	Nat. Teachers Coll, Philipp.	
	60.67	1	ZYO25	R. Capixaba, Brazil	
	60.67	0.25	ZYE22	R. Dif. Mearim, Brazil	
	60.67	1	ZYE23	R. Educ. Bragança, Brazil	
	60.67	1	HJCW	R. Suramérica, Colombia	
4950	60.60	5		Nairobi, Kenya	
	60.60	4		Dakar, Senegal	
	60.60			R. Kashmir, India	
	60.60	20/10		R. Malaysia, Sarawak	
	60.60	1	HRRZ	R. Juticalpa, Honduras Rep.	
	60.60	2	HCAV3	R. Ondas Lojas, Ecuador	
	60.60	0.5	OBX7I	R. Madre de Dios, Peru	
	60.60	1	YVMM	R. Coro, Venezuela	
4955	60.54	0.25		Nampula, Moçambique	
	60.54			R. Caiari, Brazil	
	60.54	50	HJCQ	R. Nacional, Colombia	
	60.54	0.25	OAX5S	R. Amauta, Peru	
4957	60.52			Anadyr, USSR	

kc	m	kW	Call	Stations & countries	Rem.
4958	60.51	50		Baku, USSR	
4960	60.48	10/100	VUD	AIR Delhi, India	
	60.48	1	HICN	R. Antillas, Dom. Rep.	
	60.48	1	HCPH5	La Voz del Chofer, Ecuador	
	60.48	0.5	OAX1S	R. Lambayeque, Peru	
	60.48	1	YVQA	R. Sucre, Venezuela	
4965	60.42			Sukhumi, USSR	
	60.42	20		Lusaka, Zambia	
	60.42	2.5	HJAF	R. Santa Fé, Colombia	
4967	60.40	1/10/50		R. Kuwait, Kuwait	
4968	60.38	10		Colombo, Ceylon	
4970	60.36	10		Mogadiscio, Somali Rep.	
	60.36	5	9WD215	Jesselton, Sabah	
	60.36	3	HCGH1	R. Tarqui, Ecuador	
	a60.34			R. Atlántida, Peru	
	60.34	10	YVLK	R. Rumbos, Venezuela	
4972	60.33	30/4		R. Yaoundé, Cameroon	
4975	60.30	50		Blagovechensk, USSR	
	60.30			Dushanbe, USSR	
	60.30	1	ZYP27	R. Copacabana, Brazil	
	60.30	5/2.5	ZYY9	R. Timbira, Brazil	
	60.30	1	HJJG	R. Internacional, Colombia	
4976	60.29	3/8		Kampala, Uganda	
4980	60.25	20		Accra, Ghana	
	60.25	10/50		Karachi, Pakistan	
	60.25	0.25	HICK	Ondas del Yaque, Dom. Rep.	
	60.25	0.3	HCJC5	Ondas Azuayas, Ecuador	
	60.25	1	YVOC	Ecos del Torbes, Venezuela	
4984	60.19	1	CR6RB	R. Ecclesia, Angola	
4985	60.18	4		R. Tananarive, Malagasy Rp.	
	60.18	10		R. Malaysia, Malaya	
	60.18	10	CP75	La Cruz del Sur, Bolivia	
	60.18	1.5	ZYZ15	Voz de Oeste, Brazil	
	60.18	10	HJGV	R. Independencia, Colombia	
4990	60.12	9	9Q2AD	R. Dif. UFAC, Congo D.Rp.	
	60.12	10		Lagos, Nigeria	
	60.45	10/100	VUD	AIR Delhi, India	
	60.12	10		AIR Hyderabad, India	
	60.12	1	HCSJ1	R. Xavier, Ecuador	
	60.12	10	YVMQ	R. Barquisimeto, Venezuela	
4995	60.06	1	HRQW	R. Trópico, Honduras Rep.	
	60.06	5	ZYX9	R. Brasil Central, Brazil	
	60.06	1	OAZ4C	R. Andina, Peru	
4996	60.05	50		Magadan, USSR	
*5000	60.00	0.5	MSF	Teddington, Gt. Britain	
*	60.00	1	IAM	Rome, Italy	
*	60.00	5	IBF	Turin, Italy	
*	60.00		HBN	Neuchatél, Switzerland	
*	60.00	20	RWN	Moscow, USSR	
**	60.00	4	ZUO	Johannesburg, So. Africa	
*	60.00		BPV	Peking, China	
*	60.00	2	JJY	Tokyo, Japan	
*	60.00	2	WWVII	Puunene, Hawaii	
*	60.00	10	WWH	Lanham, USA	
**	60.00	2	LOL	Buenos Aires, Argentina	
5005	59.94	0.25	OAX2S	R. Jaén, Peru	
5010	59.88	4/30		R. Garoua, Cameroon	
	59.88	4		R. Tananarive, Malagasy Rep.	
	59.88	10		FBS, Singapore	
	59.88	0.5	HCAS4	Voz de los Caras, Ecuador	
	59.88	0.4	OAX8V	R. El Eco, Peru	
	59.88	1	YVRW	R. Boconó, Venezuela	
5012	59.86			Sukhumi, USSR	
5015	59.82	50		Vladivostok, USSR	
	59.82	1	CR6RM	Moçamedes, Angola	
	59.82	5		Grenada, Windward Islands	
	59.82	1	CP48	R. Universo, Bolivia	
	59.82	0.35	OAX7Z	R. Juliaca, Peru	
5017a	59.80	5		Emis. da Guiné, Port. Guinea	
5020	59.76	4		R. Niger, Niger	
	59.76	10		Colombo, Ceylon	
	59.76	0.5	4VGS	R. Indépendence, Haiti	
	59.76	10	HJFW	Trans. Caldas, Colombia	
	59.76	10	YVKO	R. Nacional, Venezuela	
5024	59.71	1	CR6RH	R. Clube Huila, Angola	
5025	59.70	0.5		R. Pax, Moçambique	
	59.70	1	CP106	R. Litoral, Bolivia	
	59.70	1	ZYY24	R. Dif. Aquidauana, Brazil	
	59.70	1		Voz Amazonia, Brazil	
	59.70	0.5	ZYK41	Emisora Rural, Brazil	
	59.70	0.2	HCOB5	Onda Azules, Ecuador	
	59.70	0.3	OAX7Q	R. Quillabamba, Peru	
5026	59.70	3/8		Kampala, Uganda	
5030	59.64	20	YDP4	Medan, Indonesia	
	59.64	50		R. Malaysia, Malaysia	
	59.64	0.5		Bangkok, Thailand	
	59.64	1	HIBB	Voz del Papagayo, Dom. R.	
	59.64	0.15	4VGA	R. Capois la Mort, Haiti	
	59.64	7.5	YVKM	R. Continente, Venezuela	
5033	59.61	1	CR6RW	R. Cl. de Cabinda, Angola	
5035	59.58	30		Bangui, Central African Rep.	
	59.58	100		Islamabad, Pakistan	
	59.58	1	HROE	Voz de las Fronteras, Hond.	
	59.58	1	ZYW22	R. Anhanguera, Brazil	
	59.58	0.5	PRI4	R. Espirito Santo, Brazil	
	59.58	1	HJIC	La Voz del Caquetá, Colomb.	
	59.58	0.75	HCVC3	R. Centinela del Sur, Ecuador	
	59.58	0.5	OBX7F	R. Ayaviri, Peru	
	59.58	1	OAX6U	R. Ilo, Peru	
5037	59.58	20/10		R. Malaysia, Sarawak	
5040	59.52	50		Tbilisi, USSR	
	59.52	10		Emis. do Guiné, Port. Guinea	
	59.52	50	XZK42	Rangoon, Burma	
	59.52	0.25		Bangkok, Thailand	
	59.52		ZNX20	Bridgetown, Barbados	
	59.52	1	OBZ4P	R. Reloj, Peru	
	59.52	1	YVQH	R. Maturin, Venezuela	
5041	59.51	10		Emis. da Guiné, Port. Guinea	
5042	59.50	1	CR6RF	R. Clube de Benguela, Angola	9
	59.50	0.5	OBX7J	R. Madre de Dios, Peru	
5045	59.46	0.5		Sukarnopura, Indonesia	
	59.46	0.25	ZK5	Rarotonga, Cook Islands	
	59.46	1	ZYP23	R. Imperial, Brazil	
	59.46	1	OBX7O	R. Onda Imperial, Peru	
	a59.46			La Voz del Altiplano, Peru	
5047	59.43	4/100		Lomé, Togo	
	59.43	20	YDJ	Jogjakarta, Indonesia	
5050	59.41			Petropavlovsk, USSR	
	59.41	1	9Q2AC	R. Collège, Congo Dem. Re.	
	59.41	20		R. Tanzania, Tanzania	
	59.41	1	HJDW	La Voz de Medellin, Colom.	
	59.41	1.2	HCJP1	R. Jesus del Gran Poder, Ecu.	
	59.41	0.4	OAX1J	R. Tumbes, Peru	
	59.41	2	YVKD	R. Cultura, Venezuela	
5052	59.38	7.5		R. Singapura, Singapore	
5055	59.35	50		Chita, USSR	
	59.35	2.25	CP87	R. San Rafael, Bolivia	
	59.35	2	ZYO21	R. Cult. Guiabá, Brazil	
	59.35	1	ZYO23	R. Vitória, Brazil	
	59.35	0.5	HCRP1	R. Católica, Ecuador	
5056	59.33	10		Addis Ababa, Ethiopia	
5058	59.31	0.33	OAZ4A	R. Tarma, Peru	
				5060–5950 kc	
5060	59.29	1	CR6RD	Nove Lisboa, Angola	
	59.29	7.5		So. Arabian Bc.Sce, Aden	
	59.29	25	HJCW	Acción Cult. Popular, Col.	
5065	59.23	10		Petrozavodsk, USSR	
5075	59.13	10		Colombo, Ceylon	
	59.13	25	HJGC	Acción Cult. Popular, Colom.	
5090	59.00			Palana, USSR	
	59.00	0.2	4VAF	Voix de la Grand-Anse, Haiti	
5095	58.88	50	HJGG	Acción Cult. Popular, Colom.	
5110	58.71			Khabarovsk, USSR	
5137	58.00	1	CR6RV	R. Cl. de Moxico, Angola	
5255		0.5	HCPS5	Ondas Cañaris, Ecuador	
5260	57.03	15		Alma Ata, USSR	
5310	56.50	1		Thai TV Co, Thailand	
5332	56.27	50		Ulan Bator, Mongolia	
**5425	55.30	1	VNG	Lyndhurst, Australia	
5455	55.00			Moscow, USSR	
5550	54.05	1		Saraburi, Thailand	
5740	52.26	60		Erevan, USSR	
5804	51.66	25		R. Sanaa, Yemen	
**5807	51.65		GAY25	Rugby, Gt. Britain	
5825	51.50			Syktyvar, USSR	
	51.50	1		Rajsima, Thailand	
5872	51.08		CP71	R. San José, Bolivia	
5875	51.06	1	HRN	Voz de Honduras, Honduras	
5900	50.84	50		Moscow, USSR	
5902	50.83	5/135		R. Budapest, Hungary	
5915	50.72	100		Sverdlovsk, USSR	
5920	50.68	120		R. Sofia, Bulgaria	
	50.68	50		Moscow, USSR	
	50.68	50		Tashkent, USSR	
5925	50.63	50		Tashkent, USSR	
5930	50.59	100		Praha, Czechoslovakia	
	50.59	15		Arkhangelsk, USSR	
5940	50.51	50		Magadan, USSR	
	50.51	120		Minsk, USSR	
	50.51	15		R. Cambodia, Cambodia	
				5950–6200 kc (49 metre band)	
5950	50.42	5/100		Warsaw, Poland	
	50.42	50		Moscow, USSR	
	50.42	0.3	HCCV5	Quatro Rios, Ecuador	

kc	m	kW	Call	Stations & countries	Rem.
5954	50.39	1	TIQ	R. Casino, Costa Rica	
5955	50.39	100		Allouis, France	
	50.39	50		R. Berlin Int. Germ. (GDR)	
	50.39	20/50		R. Liberty, Germany	
	50.39	0.4		Larissa, Greece	
	50.39	100		Sverdlovsk, USSR	
	50.39	10/100	VUD	AIR Delhi, India	
	50.39	5		Pakanbaru, Indonesia	
	50.39	0.5		Wat Liang, Thailand	
	50.39	0.4	VRH6	Suva, Fiji Islands	
	50.39	50		R. Canada, Canada	
	50.39	5	TGNA	R. Cultural, Guatemala	
	50.39	1	HRVF	R. Exitos, Honduras Rep.	
	50.39	0.5	YNRG	R. Zelaya, Nicaragua	
	50.39	1	CP60	R. Pio XII, Bolivia	
	50.39	50	ZYR226	R. Gazeta, Brazil	
	50.39	1	CE595	Emis. Nuevo Mundo, Chile	
	50.39	0.5	OAX4P	R. Huancayo, Peru	
5960	50.34	100		Allouis, France	
	50.34	10/100/250		R. Free Europe, Germany	
	50.34	50/60/100		R. Roma, Italy	
	50.34	100		Trans World Radio, Monaco	
	50.34	50		Kaunas, USSR	
	50.34	100		Vladivostok, USSR	
	50.34	10		Lubumbashi, Congo Dem. R.	
	50.34	250		Kigali(DW), Rwanda	
	50.34			R. Kashmir, India	
	50.34	50		R. Ulan Bator, Mongolia	
	50.34	1	BEP23	Taipei, Taiwan	
	50.34	1.5		Godthåb, Greenland	
	50.34	1	HRHR	Voz de Occidente, Honduras	
	50.34	0.25	XEUMT	México City, Mexico	
	50.34	50/260		TWR Bonaire, Neth. Antilles	
	50.34	1	HJCF	Voz de Bogotá, Colombia	
	50.34	0.75	HCTR1	R. Equinoccial, Ecuador	
	50.34	0.25	OAX7L	La Voz del Altiplano, Peru	
5965	50.29	10/100/250		R. Free Europe, Germany	
	50.29	250		Woofferton(VOA), Gt. Britain	
	50.29	100		Schwarzenburg, Switzerland	
	50.29	10		Gaberones, Botswana	
	50.34	100		Tripoli, Libya	
	50.29	35		Tanger(VOA), Morocco	
	50.29	50/200		Dixon, USA	
	50.29	0.5	YNW	R. Mundial, Nicaragua	
	50.29	7.5	ZYU60	R. Guiaba, Brazil	
	50.29	0.5	HCGE5	R. Mundial, Ecuador	
5970	50.25	10/100/250		R. Free Europe, Germany	
	50.25	100		Moscow, USSR	
	50.25	100		Tashkent, USSR	
	50.25	50		Alger, Algeria	
	50.25	4		R. Brazzaville, Congo	
	50.25	10		AIR Gauhati, India	
	50.25	3	YDO2	Bandjarmasin, Indoncsia	
	50.25	1	DZCA	NCDA, Philippines	
	50.25	50		R. Canada, Canada	
	50.25	0.5	TGMZ	R. Nacional, Guatemala	
	50.25	5	HJVN	R. Horizonte, Colombia	
	50.25	10	OBX4Q	R. El Sol, Peru	
5972	50.23	1		Voz de Centroamérica, Hond.	
5975	50.21	15/100		BBC London, Gt. Britain	
	50.21	10		Gwelo, Rhodesia	
	50.21	10	HLK22	Seoul, Korea	
	50.21	100		Honolulu(VOA), Hawaii	
	50.21	1	YNRZ	R. Centenario, Nicaragua	
	50.21	1	CP44	R. Nacional LAB, Bolivia	
	50.21	10	ZYT44	R. Guarujá, Brazil	
	50.21	10	CE597	Emis. Pres. Balmaceda, Chile	
	50.21	3	ZPA6	R. Guarani, Paraguay	
5980	50.17	50/100		R. Nederland, Holland	
	50.17	100		Tbilisi, USSR	
	50.17	0.5		Freetown, Sierra Leone	
	50.17	20/250		R. South Africa, So. Africa	
	50.17	100		Beyrouth, Lebanon	
	50.17	3.5	BED30	Taipei(BCC), Taiwan	
	50.17	1.5		Godthåb, Greenland	
	50.17	1	TGAR	R. Quetzal, Guatemala	
	50.17	2	ZFY	R. Demerara, Guiana	
	50.17	10	HJLY	La Voz del Rio Grande, Col.	
	50.17	5	OBX4M	R. Panamericana, Peru	
5985	50.13	10/100/250		R. Free Europe, Germany	
	50.13	50/100		R. Nederland, Holland	
	50.13	50/100		R. Nacional, Portugal	
	50.13	25/100		Vatican Radio	
	50.13	1		R. Buéa, Cameroon	
	50.13	10/50		Karachi, Pakistan	
	50.13	1.5	BEC37	Taipei, Taiwan	
	50.13	0.5		Saung-Soon, Thailand	

kc	m	kW	Call	Stations & countries	Rem.
5985	50.13			Hanoi, Vietnam(Dem. Rep.)	
	50.13	50		Dixon, USA	
	50.13	1	LRS2	R. Splendid, Argentina	
	a50.13	10	HJGV	Transm. Independencia, Col.	
5990	50.08	10/100/250		R. Free Europe, Germany	
	50.08	15/100		BBC London, Gt. Britain	
	50.08	50/60/100		R. Roma, Italy	
	50.08	120		R. Bucharest, Rumania	
	50.08	100		Hörby, Sweden	
	50.08	100		Irkutsk, USSR	
	50.08	10		AIR Bhopal, India	
	50.08	10	YDS2	Menado, Indonesia	
	50.08	50		R. Canada, Canada	
	50.08	5	TGJA	R. Nuevo Mundo, Guatem.	
	50.08	7.5	PRL5	R. Educação, Brazil	
	50.08	1	OAX1W	R. Tumbes, Peru	
5993	50.05	10		R. Mdandaka, Congo	
5994	50.04	4		R. Martinique, Martinique	
5995	50.04	25		R. Andorra, Andorra	
	50.04	35		Thessaloniki(VOA), Greece	
	50.04	5/100		Warsaw, Poland	
	50.04	10		Blantyre, Malawi	
	50.04	3	BEC77	Taipei, Taiwan	
	50.04	250		Greenville, USA	
	50.04	1	HRP1	Ecos de Honduras, Honduras	
	50.04	1	HOM50	Circuito RPC, Panama	
	50.04	1	CP41	R. Loyola, Bolivia	
	50.04	1	HJGR	Voz del Pueblo, Colombia	
6000	50.00	1	OEI20	Aldrans, Austria	
	50.00	50/100		Moscow, USSR	
	50.00	50		R.Afghanistan, Afghanistan	
	50.00	50		Riyadh, Saudi Arabia	
	50.00	7.5		R. Singapura, Singapore	
	50.00	1	TGTA	R. Sonora, Guatemala	
	50.00	7.5	4VB	Voix de la Rev.Duv, Haiti	
	50.00	7.5		R. Americas, Swan Islands	
	50.00	25	PRK5	R. Inconfidencia, Brazil	
	50.00	1	OAX7E	R. Nac.Puno, Peru	
	50.00	5	CXA2	R. Sur, Uruguay	
	50.00	1	YVNL	R. Miranda, Venezuela	
6003	49.97	0.25		Tripolis, Greece	
	49.97	0.075		Lisbon, Portugal	
6005	49.96	20/100		Berlin(RIAS), Germany	
	49.96	50/100		R. Nederland, Holland	
	49.96	50		Sverdlovsk, USSR	
	49.26	20		Paradys, So. Africa	
	49.96	10		R. Tanzania, Zanzibar	
	49.96	10		Colombo, Ceylon	
	49.96	0.4	VRH7	Suva, Fiji Islands	
	49.96	0.075	CFCX	Montreal, Canada	
6010	49.92	15/100		BBC London, Gt. Britain	
	49.92	50/60/100		R. Roma, Italy	
	49.92	100		Moscow, USSR	
	49.92	0.25/10	VUC	AIR Calcutta, India	
	49.92	7.5/100		BBC, Malaysia	
	49.92	35		Okinawa(VOA), Ryukyu Isl.	
	49.92	10		Thai TV Co, Thailand	
	49.92	1	CJCX	Sydney, Canada	
	49.92	2.5	XEOI	R. Mil, Mexico	
	49.92	5	YSS	R. Nacional, El Salvador	
	49.92	0.25	CE601	Emisoras Norte, Chile	
	49.92	10	HJFK	La Voz Amiga, Colombia	
	49.92	2.5	OAX4V	R. América, Peru	
6015	49.88	10/100/250		R. Free Europe, Germany	
	49.88	50		Rhodes(VOA), Greece	
	49.88	35		Thessaloniki(VOA), Greece	
	49.88	10		Kinshasa, Congo (Dem.Rep).	
	49.88	100		R. Abidjan, Ivory Coast	
	49.88	250		Kigali(DW), Rwanda	
	49.88	50	HLK31	Seoul, Korea	
	49.88	50/80	WNYW	R. New York, USA	
	49.88	120/240		R. Habana, Cuba	
	49.88	0.75	4VEB	R. Caraibes, Haiti	
	49.88	25	PRA8	R. Cl. de Pernambuco, Brazil	
	49.88	0.5	HCEB4	R. Manta, Ecuador	
	49.88	1	ZPA10	R. Paraguay, Paraguay	
6020	49.83	10/100/250		R. Free Europe, Germany	
	49.83	10		R. Nederland, Holland	
	49.83	50		Khabarovsk, USSR	
	49.83	50		Kiev, USSR	
	49.83	100		Moscow, USSR	
	49.83	20		Gwelo, Rhodesia	
	49.83	2.5		AIR Simla, India	
	49.83	3		Amman, Jordan	
	49.83	250		Greenville, USA	
	49.83	2	TGDA	La Voz de Occidente, Guatem.	
	49.83	1	HRSP	R. Moderna, Honduras Rep.	

kc	m	kW	Call	Stations & countries	Rem.
6020	49.83	0.25	XEUW	El Eco de Sotavento, Mexico	
	49.83	1	OAX4Q	R. Victoria, Peru	
6025	49.79	100	DMQ6	Deutsche Welle, Germany	
	49.79	10/100/250		R. Free Europe, Germany	
	49.79	50/100		R. Nederland, Holland	
	49.79	50/100	CSA52	R. Nacional, Portugal	
	49.79	10	CR6RZ	R. Angola, Angola	
	49.79	0.3		Van, Turkey	
	49.79	5		R. Malaysia, Malaysia	
	49.79	10	ZYR63	R.Em.de Piratininga, Brazil	
	49.79	50	HCJB	La Voz de los Andes, Ecuador	
	49.79	3	ZPA1	R. Nacional, Paraguay	
6028	49.78	1	OAX8B	R. Nacional Iquitos, Peru	
6030	49.75	20		Mühlacker(SDR), Germany	
	49.75	100		Simferopol. USSR	
	49.75	4		Franceville, Gabon	
	49.75	20		Accra, Ghana	
	49.75	100		Baghdad, Iraq	
	49.75	2	DZH6	Call of the Orient, Philipp.	
	49.75	0.1	CFVP	Calgary, Canada	
	49.75	100		Bethany, USA	
	49.75	5	TGTQ	R. Internacional, Guatemala	
	49.75	1	CE603	R. Mineria, Chile	
	49.75	1	HJZJ	R. Nacional, Colombia	
6035	49.71	50/100		R. Nederland, Holland	
	49.71	30		R. Monte Carlo, Monaco	
	49.71	50		Riazan, USSR	
	49.71	50		Vladivostok, USSR	
	49.71	0.2	9Q2AB	R. Lubumbashi, Congo	
	49.71	50		Monrovia(VOA), Liberia	
	49.71	4		R. Mauritania, Mauritania	
	49.71	50	XZK3	Rangoon, Burma	
	49.71	10/100	VUD	AIR Delhi, India	
	49.71	10	HLK53	Seoul, Korea	
	49.71	1	HRTL	R.Tic Tac, Honduras Rep.	
	49.71	10	ZYZ21	R. Globo, Brazil	
	49.71	0.5	HCNK3	R. Cariamanga, Ecuador	
	49.71	0.2	OAX6B	R. Landa, Peru	
	49.71	1	CXA30	R. Nacional, Uruguay	
6037	49.69	2	TIFC	Faro del Caribe, Costa Rica	
6040	49.67	100		Munich(VOA), Germany	
	49.67	100		Moscow, USSR	
	49.67	4		R. Yaoundé, Cameroon	
	49.67	10/100	VUD	AIR Delhi, India	
	49.67	7.5	BED9	Taipei(BCC), Taiwan	
	49.67	0.5	TGCO	Voz del Trópico, Guatemala	
	49.67	0.5	HRDN	R. Caribe, Honduras Rep.	
	49.67	10	HJCB	La Voz del Tolima, Colombia	
6042	49.65	0.25	OAX6A	R. Arequipa, Peru	
6045	49.63	5		Athens(FBS), Greece	
	49.63	100		Schwarzenburg, Switzerland	
	49.63	100	YDR	Djakarta, Indonesia	
	49.63	0.25	XEXQ	R. Universidad, Mexico	
	49.63	50/200		Greenville, USA	
	49.63	1	HOU31	Voz del Baru, Panama	
	49.63	25	ZYS33	R. Clube Paranaense, Brazil	
	49.63	1	CXA61	R. Sport, Uruguay	
6050	49.59	100		R. Berlin Int. Germ(GDR)	
	49.59	50/250		BBC London, Gt. Britain	
	49.59	50/60/100		R. Roma, Italy	
	49.59	20/50		Irkutsk, USSR	
	49.59	5/100		R. Clube de Moçambique	
	49.59	10		Ibadan(WNRS), Nigeria	
	49.59	10/100	VUD	AIR Delhi, India	
	49.59	40		Call of the Orient, Philipp.	
	49.59	1	HRLP	R. América, Honduras Rep.	
	49.59	0.5	CE605	R. Libertad, Chile	
	49.59	30/50	HCJB	La Voz de los Andes, Ecuador	
6055	49.55	100		Praha, Czechoslovakia	
	49.55	100		Moscow, USSR	
	49.55	50		Chita, USSR	
	49.55	50		Kigali, Rwanda	
	49.55	10/50	JOZ2	Tokyo, Japan	
	49.55	1/10/100		R. Kuwait, Kuwait	
	49.55	0.25	DYH4	Dumaguete City, Philippines	
	49.55	250		Greenville, USA	
	49.55	1	CP18	R. El Condor, Bolivia	
	49.55	10	PRB21	R. Panamericana, Brazil	
	49.55	5	HJEX	R. Pacifico, Colombia	
	49.55	1	OAX6E	R. Continental, Peru	
	49.55	5	CXA53	La Voz de Melo, Uruguay	
6060	49.50	250		Wofferton(VOA), Gt. Britain	
	49.50	25		Caltanisetta, Italy	
	49.50	50		Chita, USSR	
	49.50	4		R. Niger, Niger	
	49.50	20		Lusaka, Zambia	
	49.50	120/240		R. Habana, Cuba	
	49.50	1	HIAZ	R. Santiago, Dom. Reo.	
	49.50	1	TGRLA	R.Cadena Landívar, Guatem.	
	49.50	1	HRU	R. Centro, Honduras Rep.	
	49.50	50	LRA31	Buenos Aires, Argentina	
	49.50	0.75	HCAC1	Voz Democracia, Ecuador	
6062	49.48	2		Bangkok, Thailand	
	49.48	0.25	OAX8L	R. Telestar, Peru	
6065	49.46	100		Hörby, Sweden	
	49.46	100		Minsk, USSR	
	49.46	100	ETLF	Addis Ababa, Ethiopia	
	49.46	7.5/100		BBC, Cyprus	
	49.46	10/100	VUD	AIR Delhi, India	
	49.46			AIR Kohima, India	
	49.46	100		Delano, USA	
	49.46	1	XEXG	R. Dif. México, Mexico	
	49.46	10	PRL8	R. Nac. Brasília, Brazil	
6070	49.42	100		R. Sofia, Bulgaria	
	49.42	10/100/250		R. Free Europe, Germany	
	49.42	150		Lvov, USSR	
	49.42	100/250		Accra, Ghana	
	49.42	4		R. Université, Malagasy Rep.	
	49.42	4		Ziguinchor, Senegal	
	49.42	0.5	8FW32	Sukarnopura, Indonesia	
	49.42	10/50		Karachi, Pakistan	
	49.42	1	HSK5	R. Thailand, Thailand	
	49.42	1	CFRX	Toronto, Canada	
	49.42	1.2	TGPA	R. Palmeras, Guatemala	
	49.42	0.5	HCIW5	R. El Mercurio, Ecuador	
	49.42	0.3	OAX4O	Onda Popular, Peru	
6075	49.38	100	DMQ6	Deutsche Welle, Germany	
	49.38	50		Volgograd, USSR	
	49.38	10		Colombo, Ceylon	
	49.38	35/100		Okinawa(VOA), Ryukyu Isl.	
	49.38	0.5	HIDB	R. Libertad, Dom. Rep.	
	49.38	5	HRMH	La Voz del Junco, Honduras	
	49.38	5	CE607	Soc.Nac.de Mineria, Chile	
	49.38	10	HJHV	Acción Cult. Popular, Colom.	
	49.38	2.5	CXA3	R. Arial Uruguay	
6080	49.34	50/100		R. Berlin Int.Germ.(GDR)	
	49.34	10/100/250		R. Free Europe, Germany	
	49.34	15/100		BBC London. Gt. Britain	
	49.34	250		Wofferton(VOA), Gt.Britain	
	49.34	10	CSB51	R.Cl. Portuguese, Portugal	
	49.34	20		Komsomolsk, USSR	
	49.34	100		Alger, Algeria	
	49.34	20/200		R. Japan, Japan	
	49.34	7.5/100		BBC, Malaysia	
	49.34	0.25	DZI7	Voice of Manila, Philipp.	
	49.34	7.5	ZL7	Wellington, New Zealand	
	49.34	0.01	CFKX	Vancouver, Canada	
	49.34	0.5	TGSM	R. Nac. S. Marcos, Guatem.	
	49.34		HCDG2	R. Bolivar, Ecuador	
6082	49.32	15	OAX4Z	R. Nacional Lima, Peru	
6085	49.30	10	DMR24	Munich (BR), Germany	
	49.30	50/100		R. Nederland, Holland	
	49.30	50		Kiev, USSR	
	49.30	10		R.Kisangani, Congo Dem. R.	
	49.30	10/100	VUD	AIR Delhi, India	
	49.30	5	TAV5	R. Ankara, Turkey	
	49.30	50/200		Delano, USA	
	49.30	15	ZYK2	R. Jornal do Comércio, Br.	
	49.30	1	HJDX	Ecos de Pasto, Colombia	
6090	49.26	15/100		BBC London, Gt. Britain	
	49.26	50		R. Luxembourg, Luxemb.	
	49.26	15		Chita, USSR	
	49.26	50		Simferopol, USSR	
	49.26	10	ELBC	Liberian Bc. Corp, Liberia	
	49.26	10		R. Kaduna, Nigeria	
	49.26	50		R. Cambodia, Cambodia	
	49.26	3	BEC26	Taipei, Taiwan	
	49.26	2	VLI6	Sydney, Australia	
	49.26	7.5	HISD	R. TV Dominicana, Dom. R.	
	49.26	2	TGDZ	R. Centroamericana, Guat.	
	49.26	1	HRNQ	R. Morazán, Honduras Rep.	
	49.26	1	XECMT	R. Mante, Mexico	
	49.26	100	LRY1	R. Belgrano, Argentina	
6095	49.22	100		Praha, Czechoslovakia	
	49.22	10/100/250		R. Free Europe, Germany	
	49.22	35		Thessaloniki, Greece	
	49.22	50/60/100		R. Roma, Italy	
	49.22	50		Mogadiscio, Somali Rep.	
	49.22	20		Paradys, So. Africa	
	49.22	100		Baghdad, Iraq	
	49.22	25	ZYB7	R.Dif. de São Paulo, Brazil	
	49.22	5	HJPT	R. Colosal, Colombia	
	a49.22	1	HJIW	Voz del Centro, Colombia	
	49.22	0.25	OAX4H	R. Mundial, Peru	

kc	m	kW	Call	Stations & countries	Rem.
6097	49.20	1	HSK5	R. Thailand, Thailand	
6100	49.18	100	DMQ6	Deutsche Welle, Germany	
	49.18	100		R. Belgrade, Yugoslavia	
	49.18	50		Kursk, USSR	
	49.18	7.5		AIR Kurseong, India	
	49.18	100		R. Malaysia, Malaysia	
	49.18	0.25		Bangkok, Thailand	
	49.18		TGOA	Voz de las Americas, Guat.	
	49.18	0.25	4VO	R. Lumière, Haiti	
	49.18	0.54	4V--	Voix de l'Ave Maria, Haiti	
	49.18	1	CE610	R. Calama, Chile	
	49.18	1	HCSP4	Voz del Volante, Ecuador	
6105	49.14	10/100/250		R. Free Europe, Germany	
	49.14	1		Djakarta, Indonesia	
	49.14	7.5	BEC61	Air Force St, Taiwan	
	49.14	1		Bangkok, Thailand	
	49.14	0.25	XEQM	Mérida, Mexico	
	49.14	5	ZYN6	Ceará R. Clube, Brazil	
	49.14	5	HJNV	R. Visión, Colombia	
	49.14	1	OAX6F	R. Nacional Tacna, Peru	
6110	49.10	75		BBC London, Gt. Britain	
	49.10	50		Baku, USSR	
	49.10	100/250		Accra, Ghana	
	49.10			R. Kashmir, India	
	49.10	7.5/100		BBC, Malaysia	
	49.10	1	HIZ	Broadc. Nacional, Dom. R.	
	49.10	1	HRXV	R. Comayagüela, Honduras	
	49.10	1	ZPA11	R. Charitas, Paraguay	
	49.10	1	YVNK	R. Cabimas, Venezuela	
6115	49.06	5		R. Berlin Int. Germ. (GDR)	
	49.06	50		Khabarovsk, USSR	
	49.06	1		R. Douala, Cameroon	
	49.06	5/100		R.Clube de Moçambique	
	49.06	1	XEUDS	R. Univ. de Sonora, Mexico	
	49.06	100	ZYC7	R. Tupi, Brazil	
	49.06	5	CE611	Soc. Nac. de Agric, Chile	
	49.06	1	HJIQ	La Voz del Llano, Colombia	
	49.06	1	OBX4Z	R. Luz, Peru	
	49.06	10	OBZ4O	R. Union, Peru	
	49.06	1	CXA73	R. Clarin, Uruguay	
6116	49.02	5		Dalat, Vietnam	
6120	49.02	15	OIX7	Pori, Finland	
	49.02	100	DMQ6	Deutsche Welle, Germany	
	49.02	10/100/250		R. Free Europe, Germany	
	49.02	15/100		BBC London, Gt. Britain	
	49.02	100		Schwarzenburg, Switzerland	
	49.02	50		Sverdlovsk, USSR	
	49.02	7.5/100		BBC, Cyprus	
	49.02	10		AIR Hyderabad, India	
	49.02	10		Rawalpindi, Pakistan	
	49.02	50	DZF4	Call of the Orient, Philipp.	
	49.02	0.35	TGAO	Voz de la Perla de Oriente, G.	
	49.02	2.5	4VE	R.St. 4VEH, Haiti	
	49.02	0.5	XETS	R. XETS, Mexico	
	49.02	1	YNCA	R. Atlantico, Nicaragua	
	49.02	10	LRX1	R. El Mundo, Argentina	
6125	48.98	10/100/250		R. Free Europe, Germany	
	48.98	15/100		BBC London, Gt. Britain	
	48.98	3/10		R. Kasai, Congo Dem. Rep.	
	48.98	35/100		Tanger (VOA), Morocco	
	48.98	250		Greenville, USA	
	48.98		HRQ	R. Suyapa, Honduras Rep.	
	48.98	1	CP15	R. El Condor, Bolivia	
	48.98	7.5	PRG9	R. Nac. de São Paulo, Brazil	
	48.98	1	HJKE	R. Continental, Colombia	
	48.98	10	CXA4	S.O.D.R.E, Uruguay	
6128	48.96	0.1	OAX7A	R. Cuzco, Peru	
6130	48.94	10/100/250		R. Free Europe, Germany	
	48.94	5/120	LKJ	R. Norway, Norway	
	48.94	100		R. Nacional, Spain	
	48.94	50		Kalatch, USSR	
	48.94	100/250		Accra, Ghana	
	48.94	10		Colombo, Ceylon	
	48.94	10		AIR Gauhati, India	
	48.94	10		Vientiane, Laos	
	48.94	0.5	CHNX	Halifax, Canada	
	48.94	1	YVTE	R. Valles del Tuy, Venezuela	
6135	48.90	100		Praha, Czechoslovakia	
	48.90	5/100		Warsaw, Poland	
	48.90	10		R. Malaysia, Malaysia	
	48.90	4		Papéete, Tahiti	
	48.90	120/240		R. Habana, Cuba	
	48.90	1	HRME	R. El Patio, Honduras Rep.	
	48.90	1	CP30	R. Sta. Cruz, Bolivia	
	48.90	5	PRC21	R. TV Gaucha, Brazil	
	48.90	10	CE613	Concepción, Chile	
	48.90	0.5	OCX4M	R. Pasco, Peru	

kc	m	kW	Call	Stations & countries	Rem.
6140	48.86	10/100/250		R. Free Europe, Germany	
	48.86	5/135		R. Budapest, Hungary	
	48.86	100		R. Nacional, Spain	
	48.86	1		Tripoli, Libya	
	48.86	10/100	VUD	AIR Delhi, India	
	48.86	20/200		R. Japan, Japan	
	48.86	10	VLW6	Perth, Australia	
	48.86	1	TGHC	R. Universal, Guatemala	
	48.86	0.25	XERUU	R. Univ. Chihuahua, Mexico	
	48.86	0.5	YNWW	R. Sport, Nicaragua	
	48.86	0.5	CP81	Luis de Fuentes, Bolivia	
	48.86	1	HJNE	R. El Sol, Colombia	
	48.86	0.2	OAX1A	R. Delcar, Peru	
	48.86	0.02	OAX9B	R. Amazonas, Peru	
	48.86	10	CXA20	R. Monte Carlo, Uruguay	
6145	48.82	100		Deutsche Welle, Germany	
	48.82	100		Moscow, USSR	
	48.82	2.5		Enugu (NBC), Nigeria	
	48.82	50/200		Dixon, USA	
	48.82	1	HRXE	R. Mil Treinta, Honduras R.	
	48.82	50	PRL9	R. Nacional Rio, Brazil	
	48.82	1	HJEQ	Voz del Cauca, Colombia	
	48.82	0.5	OAZ4E	R. Mineria, Peru	
6150	48.78	15/100		BBC London, Gt. Britain	
	48.78	250		Woofferton (VOA), Gt. Brit.	
	48.78	120		R. Bucharest, Rumania	
	48.78	10		R. Belgrade, Yugoslavia	
	48.78	20		Paradys, So. Africa	
	48.78	1	CR6RF	R. Clube de Benguela, Ang.	
	48.78	20		Paradys, So. Africa	
	48.78	10/100	VUD	AIR Delhi, India	
	48.78	10	VLR6	Melbourne, Australia	
	48.78	1	TIJCV	R. Guapiles, Costa Rica	
	48.78	0.5	TGAZ	R. Continental, Guatemala	
	48.78	5	CE615	La Voz de Chile, Chile	
	48.78	2	OBX4G	R. Excelsior, Peru	
6155	48.74	4/100	OEI21	Vienna, Austria	
	48.74	3	CSB52	R. Renascença, Portugal	
	48.74	50		Lvov, USSR	
	48.74	18		Conakry, Guinea	
	48.74	5		R. Tabriz, Iran	
	48.74	50		Baghdad, Iraq	
	48.74	10		Tokyo (FEN), Japan	
	48.74	7.5		R. Singapura, Singapore	
	48.74	0.25	4VWA	R. Citadelle, Haiti	
	48.74	1	CP12	R. Fides, Bolivia	
	48.74	1	OAX8Q	R. Pucallpa, Peru	
	48.74	10	CXA12	R. Carve, Uruguay	
6157	48.72	120		R. Tirana, Albania	
6160	48.70	100		R. Berlin Int. Germ. (GDR)	
	48.70	10/100/250		R. Free Europe, Germany	
	48.70	50		Sebaa-Aioun, Morocco	
	48.70	1	HSK4	R. Thailand, Thailand	
	48.70	0.5	CKZU	Vancouver, Canada	
	48.70	0.3	CKZN	St. John's, Canada	
	48.70	0.25	TGZA	R. Club, Guatemala	
	48.70	10	HJKJ	Nueva Granada, Colombia	
	48.70	1	OCX4G	R. Mundo, Peru	
6163	48.66	0.15	4VCP	Voix du Nord, Haiti	
6165	48.66	250		Schwarzenburg, Switzerland	
	48.66	100		Kiev, USSR	
	48.66	15		Vladivostok, USSR	
	48.66	30		R. Tchad, Chad	
	48.66	250		Monrovia (VOA), Liberia	
	48.66	120		Lusaka, Zambia	
	48.66	20		Damascus, Syria	
	48.66	20/200		Saigon, Vietnam	
	48.66	1	HRTV	R. Televisión, Honduras R.	
	48.66	10	XEWW	Voz América Latina, Mexico	
	48.66	7.5	ZYR58	R.Dif. São Paulo, Brazil	
	48.66	0.4	OAX2A	R. Trujillo, Peru	
6170	48.62	20/50		R. Liberty, Germany	
	48.62	50/100		BBC London, Gt. Britain	
	48.62	7.5/100		BBC, Cyprus	
	48.62	10/100	VUD	AIR Delhi, India	
	48.62	10		AIR Lucknow, India	
	48.62	10		Padang, Indonesia	
	48.62	10	DUH2	Philipp. Bc. Sce, Philipp.	
	48.62	7.5/50		Malolos (VOA), Philippines	
	48.62	120/240		R. Habana, Cuba	
	48.62	4		R. Cayenne, Fr. Guiana	
	48.62		CE617	R. Universidád, Chile	
	48.62	0.25	HCPJ2	R. Fluminense, Ecuador	
	48.62	0.35	OBX4B	R. Corporación, Peru	
	48.62	1	CXA21	R. Fenix, Uruguay	
	48.62	10	YVKG	R. Nacional, Venezuela	
6175	48.58	100		Allouis, France	

kc	m	kW	Call	Stations & countries	Rem.
6175	48.58	120		Kazan, USSR	
	48.58	50		Alger, Algeria	
	48.58	20		Kaduna (NBC), Nigeria	
	48.58	100		R. Malaysia, Malaysia	
	48.58	10	ZYV74	R. Guarani, Brazil	
	48.58	0.3	OAX7C	R. Tahuantisuyo, Peru	
6180	48.54	15/100		BBC London, Gt. Britain	
	48.54	50		Tashkent, USSR	
	48.54	15/250		Monrovia (VOA), Liberia	
	48.54	5/100		R. Clube de Moçambique	
	48.54	10/100	VUD	AIR Delhi, India	
	48.54	1	TGWB	Voz de Guatemala, Guatem.	
	48.54	10	LRA34	R. Nac. Mendoza, Argentina	
	48.54	50	HJWT	R. Nacional, Colombia	
	48.54	0.5	OBX4P	R. Miraflores, Peru	
6185	48.50	100	DMQ6	Deutsche Welle, Germany	
	48.50	10/100/250		R. Free Europe, Germany	
	48.50	10/120	LLI	R. Norway, Norway	
	48.50	10/100	CSA29	R. Nacional, Portugal	
	48.50	50		Dushanbe, USSR	
	48.50	100		Addis Ababa, Ethiopia	
	48.50	10		Ibadan (WNBS), Nigeria	
	48.50	10		Colombo, Ceylon	
	48.50	15		Poro (VOA), Philippines	
	48.50	100		Delano, USA	
	48.50	0.5	HRMT	R. Molino Rojo, Hond. R.	
	48.50	1	XEICM	La Voz del Maestro, Mexico	
	48.50	1	CP9	R. Amauta, Bolivia	
	48.50	10	ZYR77	R. Bandeirantes, Brazil	
6190	48.47	10	DRM23	R. Bremen, Germany	
	48.47	120		R. Bucharest, Rumania	
	48.47	15		Petropavlovsk, USSR	
	48.47	25/100		Vatican Radio	
	48.47	10/100	VUD	AIR Delhi, India	
	48.47	110/250		Bethany/Greenville, USA	
	48.47	0.1	HIAU	La Voz de la Libertad, D.R.	
	48.47	10	CE619	R. Corporación, Chile	
	48.47	0.4	OAX4G	R. Lima, Peru	
6195	48.43	50/100		BBC London, Gt. Britain	
	48.43	50		Baku, USSR	
	48.43	10		R. Burundi, Burundi	
	48.43	50		R. Tunis, Tunisia	
	48.43	1	4VHW	R. Haiti, Haiti	
	48.43	1	HRD2	Voz Atlantida, Honduras R.	
	48.43	10	PRD21	Emis. Continental, Brazil	
	48.43	1	HJEZ	Voz de Cali, Colombia	
	48.43	1.5	HCEH6	R. Cosmopolita, Ecuador	
6198	48.40	0.3	OAX1Y	R. Sudamericana, Peru	
6200	48.39	50		Lvov, USSR	
	48.39	1	YNJJ	R. Norte, Nicaragua	
6204	48.37	0.2	8EH	Bandung, Indonesia	
6205	48.35	1	TIJCD	R. Atenas, Costa Rica	
	48.35	0.5	TGFP	R. Nacional Tikal, Guatem.	
6207	48.33	1	TIHGB	R. Reloj, Costa Rica	
				6210–7100kc	
6215	48.27	1	TIRHB2	R. Popular, Costa Rica	
6234	48.10	5/135		R. Budapest, Hungary	
6235	48.10	10/50		Karachi, Pakistan	
6245	48.04	50		R. Sofia, Bulgaria	
6250	48.00	5	EAJ206	R. Emis. S. Isabel, Sp. Guin.	
	48.00	5/50		Pyongyang, Korea (Dem.R.)	
6280	47.77	1		Istanbul, Turkey	
6290	47.69	5/50		Pyongyang, Korea (PDR)	
6383	47.00	50		Ulan Bator Mongolia	
6400	46.87	5/50		Pyongyang, Korea (PDR)	
6405	46.84	0.25		Bangkok, Thailand	
**6428	46.67	10	VHP3	Belconnen, Australia	
**6475	46.33	5	DAM	Elmshorn, Germany	
6520	46.00	0.4		R. Gorgan, Iran	
6540	45.87	120/240		Pyongyang, Korea (PDR)	
6600	45.45	120/240		Pyongyang, Korea (PDR)	
6650	45.11	120/240		Pyongyang, Korea (PDR)	
6660	45.04	0.2		R. Kukësi, Albania	
6710a	44.71			R. Delcar, Peru	
6770	44.31			Alma Ata, USSR	
6818	44.01	0.4		R. Sanandaj, Iran	
6825	43.96			Tashkent, USSR	
6850	43.80	0.35		Pathfinders St, Poland	
6870	43.64			Alma Ata, USSR	
6940	43.20	0.5		R. Rezaieh, Iran	
6980	42.98	1	YDX3	Tdj. Pinang, Indonesia	
**6985	42.95		GIC26	Hailsham, Gt. Britain	
7010	42.80	10/50		Karachi, Pakistan	
7050	42.55	50/100		Cairo, Un. Arab. Rep.	
7060	42.49			Hanoi, Vietnam (Dem. R.)	
7064	42.46	100		R. Iran, Iran	
7075	42.40	50/100		Cairo, Un. Arab Rep.	

kc	m	kW	Call	Stations & countries	Rem.
				7100–7300kc (41 metre band)	
7100	42.25	5/135		R. Budapest, Hungary	
	42.25	7.5	YDJ2	Jogjakarta, Indonesia	
	42.25	0.25	TAO6	Izmir, Turkey	
7105	42.22	10/100/250		R. Free Europe, Germany	
	42.22	250		Woofferton (VOA), Gt. Brit.	
	42.22	100		R. Nacional, Spain	
	42.22	4		R. Brazzaville, Congo	
	42.22	30		Tananarive, Malagasy Rep.	
	42.22	35		Colombo (VOA), Ceylon	
	42.22	10/100	VUD	AIR Delhi, India	
	42.22	5		R. Nepal, Nepal	
	42.22	2.5		Bangkok, Thailand	
	42.22	1		Thai TV Co, Thailand	
7110	42.19	75		BBC London, Gt. Britain	
	42.19	50		Omsk, USSR	
	42.19	3/8		Kampala, Uganda	
	42.19	35		Colombo (VOA), Ceylon	
	42.19	7.5/100		BBC, Malaysia	
	42.19	50		R. Malaysia, Malaysia	
	42.19	10		Quetta, Pakistan	
	42.19	1	BED77	Taipei (BCC), Taiwan	
7115	42.16	100		Praha, Czechoslovakia	
	42.16	10/100/250		R. Free Europe, Germany	
	42.16	0.5	CR6RE	R. Cl. de Malanje, Angola	
	42.16	10		Kinshasa, Congo Dem. R.	
	42.16	10		Sebaa-Aioun, Morocco	
	42.16	0.25		Porto Amerlia, Moçamb.	
	42.16	0.5	VQO7	Solomon Islands	
7118	42.14	10		Denpassar, Indonesia	
7120	42.13	75		BBC London, Gt. Britain	
	42.13	50		Tula, USSR	
	42.13	30		R. Tchad, Chad	
	42.13	10		R. Hargeisa, Somalia	
	42.13	10/100	VUD	AIR Delhi, India	
	42.13	50	XZK4	Rangoon, Burma	
	42.13	10/100	VUB	AIR Bombay, India	
	42.13	7.5/100		BBC, Malaysia	
7125	42.11	100	DMQ7	Deutsche Welle, Germany	
	42.11	5/100		Warsaw, Poland	
	42.11	18		Conakry, Guinea	
	42.11	5		Nairobi, Kenya	
	42.11	10/100	VUD	AIR Delhi, India	
7130	42.08	100	DMQ7	Deutsche Welle, Germany	
	42.08	15/100		BBC London, Gt. Britain	
	42.08	50/100	CSA55	R. Nacional, Portugal	
	42.08	50		Krasnoiarsk, USSR	
	42.08	100		Minsk, USSR	
	42.08	10/50		Karachi, Pakistan	
	42.08	10		Peshawar, Pakistan	
	42.08	60	BED7	Taipei (BCC), Taiwan	
	42.08	20/10		R. Malaysia, Sarawak	
7135	42.05	30		R. Monte Carlo, Monaco	
	42.05	250		Monrovia (VOA), Liberia	
	42.05	4		R. Niger, Niger	
	42.05	10/100	VUD	AIR Delhi, India	
	42.05	7.5/100		BBC, Malaysia	
	42.05	50		Poro (VOA), Philippines	
	42.05	35/100		Okinawa (VOA), Ryukyu Isl.	
	42.05	0.5		Wat Liang, Thailand	
7140	42.02	10/100/250		R. Free Europe, Germany	
	42.02	15/50/75		BBC London, Gt. Britain	
	42.02	50		Riga, USSR	
	42.02	0.25	CR6RA	R. Clube de Angola, Angola	
	42.02	7.5/100		BBC, Cyprus	
	42.02	10		AIR Hyderabad, India	
	42.02	1	YDR2	Ambon, Indonesia	
	42.02	10		Quetta, Pakistan	
7143	42.01	1.6	TAO5	Istanbul, Turkey	
7145	41.99	10/100/250		R. Free Europe, Germany	
	41.99	5/100		Warsaw, Poland	
	41.99	20		Novosibirsk, USSR	
	41.99	18		R. Mali, Mali	
	41.99	7.5/50		Damascus, Syria	
7150	41.96	15/100		BBC London, Gt. Britain	
	41.96	50		Serpukhov, USSR	
	41.96	7.5/100		BBC, Malaysia	
	41.96			Male Sinico R, Maldive Isl.	
	41.96	3	BED35	Taipei (BCC), Taiwan	
7155	41.92	10/100/250		R. Free Europe, Germany	
	41.92	20/50		R. Liberty, Germany	
	41.92	15/100		BBC London, Gt. Britain	
	41.92	0.25		Joannina, Greece	
	41.92	30		Tananarive, Malagasy Rep.	
	41.92	4		R. Niger, Niger	
	41.92	100		Amman, Jordan	
7160	41.90	100		Allouis ,France	

kc	m	kW	Call	Stations & countries	Rem.
7160	41.90	50		Lvov, USSR	
	41.90	1	CR6RD	Nova Lisboa, Angola	
	41.90	0.25		Quelimane, Moçambique	
	41.90	0.3		R. Mogadiscio, Somali Rep.	
	41.90	10/100	VUD	AIR Delhi, India	
	41.90	10	VUM	AIR Madras, India	
	41.90	1	DUH9	R. University, Philippines	
	41.90	20/10		R. Malaysia, Malaysia	
	41.90	0.25		Don Muang, Thailand	
7161	41.90	1		Serrae, Greece	
7165	41.87	10/100/250		R. Free Europe, Germany	
	41.87	50/100		R. Nederland, Holland	
	41.87	10		Lubumbashi, Congo	
	41.87	100		Tripoli, Libya	
	41.87	20		R. Tanzania, Tanzania	
	41.87	10/100	VUD	AIR Delhi, India	
	41.87	0.5		Biak, Indonesia	
	41.87	35		Okinawa (VOA), Ryukyu Isl.	
7170	41.84	250		Woofferton (VOA), Gt. Brit.	
	41.84	50		Tashkent, USSR	
	41.84	50		Novosibirsk, USSR	
	41.84	50		Alger, Algeria	
	41.84	10		Kinshasa, Congo (Dem.Rep.)	
	41.84	100		Tanger (VOA), Morocco	
	41.84	25		Dakar, Senegal	
	41.84			AIR Kohima, India	
	41.84	7.5		R. Singapura, Singapore	
	41.84	4		R. Nouméa, New Caledonia	
7175	41.81	100	DMQ7	Deutsche Welle, Germany	
	41.81	10/100/250		R. Free Europe, Germany	
	41.81	5		Caltanisetta, Italy	
	41.81	250		Starobelsk, USSR	
	41.81	1	CR6RS	Lobito, Angola	
	41.81	25		R.TV Congolaise, Congo	
	41.81	50/250		Monrovia (VOA), Liberia	
	41.81	2.5		Gwelo, Rhodesia	
	41.81	50		Poro (VOA), Philippines	
	41.81	35		Okinawa (VOA), Ryukyu Isl.	
7180	41.78	100		Allouis, France	
	41.78	10/100/250		R. Free Europe, Germany	
	41.78	20/50		R. Liberty, Germany	
	41.78	10		AIR Bhopal, India	
	41.78	100		Baghdad, Iraq	
	41.78	0.5	BEG20	Taipei, Taiwan	
7185	41.75	5/100		R. Berlin Int. Germ. (GDR)	
	41.75	75		BBC London, Gt. Britain	
	41.75	50		Sverdlovsk, USSR	
	41.75	20		Paradys, So. Africa	
	41.75	20		Damascus, Syria	
7189	41.73	20	4XB49	Tel Aviv, Israel	
7190	41.72	10/100/250		R. Free Europe, Germany	
	41.72	10		Colombo, Ceylon	
	41.72	10	8FW33	Sukarnopura, Indonesia	
	41.72	1	HLK30	Seoul, Korea	
	41.72	10		R. Australia, Australia	
7195	41.70	10/100/250		R. Free Europe, Germany	
	41.70	120		R. Bucharest, Rumania	
	41.70	50		Tula, USSR	
	41.70	250		Monrovia (VOA), Liberia	
	41.70	0.25		Nampula, Moçambique	
	41.70	3/8		Kampala, Uganda	
	41.70	10/100	VUD	AIR Delhi, India	
	41.70	20/200		R. Japan, Japan	
7200	41.67	250		Woofferton (VOA), Gt. Brit.	
	41.67	50		Vladivostok, USSR	
	41.67	10		R. Belgrade, Yugoslavia	
	41.67	1	9Q2AC	R. Collège, Congo Dem. Rep.	
	41.67	0.35	OQ2AB	Lubumbashi, Congo Dem. R.	
	41.67	50		R. Afghanistan, Afghanistan	
	41.67	10/100	VUD	AIR Delhi, India	
	41.67	100		Islamabad, Pakistan	
	41.67	10	BEC76	Taipei, Taiwan	
7203	41.65	1	CR6RO	R. Clube do Bie, Angola	
7205	41.64	100	DMQ7	Deutsche Welle, Germany	
	41.64	10/100/250		R. Free Europe, Germany	
	41.64	35		Thessaloniki(VOA), Greece	
	41.64	100		Moscow, USSR	
	41.64	10	CR7RB	R. Pax, Moçambique	
7210	41.61	10/100/250		R. Free Europe, Germany	
	41.61	50/100		BBC London, Gt. Britain	
	41.61	50/100		R. Nederland, Holland	
	41.61	10		Tromsö, Norway	
	41.61	0.4		Ukesenderen, Norway	
	41.61	25/100		Schwarzenburg, Switzerland	
	41.61	50		Vladivostok, USSR	
	41.61	10		Nairobi, Kenya	
	41.61	4/100		Dakar, Senegal	

kc	m	kW	Call	Stations & countries	Rem.
7210	41.61	0.25/10	VUC	AIR Calcutta, India	
7215	41.58	0.5		Kozani(FBS), Greece	
	41.58	50/100		Cairo, Un.Arab Rep.	
	41.58	1		R. Abidjan, Ivory Coast	
	41.58	10/100	VUD	AIR Delhi, India	
	41.58	1		AFNT, Taiwan	
7220	41.55	20/50		R. Liberty, Germany	
	41.55	5/135		R. Budapest, Hungary	
	41.55	100		Schwarzenburg, Switzerland	
	41.55	50		Vladivostok, USSR	
	41.55	30		Bangui,Central African Rep.	
	41.55	50		Riyadh, Saudi Arabia	
	41.55	100		R. Australia, Australia	
7225	41.52	10/100/250		R. Free Europe, Germany	
	41.52	50/100		R. Nacional, Portugal	
	41.52	120		R. Bucharest, Rumania	
	41.52	10		Sebaa Aioun, Morocco	
	41.52	10/100	VUD	AIR Delhi, India	
	41.52	1		Lahore, Pakistan	
7230	41.49	75		BBC London, Gt. Britain	
	41.49	50/110		Lvov, USSR	
	41.49	0.75	CR6RM	R.C1.de Moçamedes, Angola	
	41.49	20		Paradys, So. Africa	
	41.49	4		Ouagadougou, Upper Volta	
	41.49	7.5/100		BBC, Cyprus	
	41.49	5	JKH	Tokyo(NHK), Japan	
	41.49	10	JOZ6	Tokyo, Japan	
	41.49	3	DZL9	Call of the Orient, Philipp.	
	41.49	100		Jeddah, Saudi Arabia	
	41.49	1		Paruskawan, Thailand	
7235	41.47	10/100/250		R. Free Europe, Germany	
	41.47	50/60/100		R. Roma, Italy	
	41.47	10	CR6RZ	R. Angola, Angola	
	41.47	35/100		Tanger(VOA), Morocco	
	41.47	10/100	VUD	AIR Delhi, India	
	41.47	7.5/100		BBC, Malaysia	
	41.47	50/20		Damascus, Syria	
7240	41.44	50/60/100		R. Roma, Italy	
	41.44	10/120	LLR	R. Norway, Norway	
	41.44	50		Tula, USSR	
	41.44	4/30		R. Garoua, Cameroon	
	41.44	10		Nairobi, Kenya	
	41.44	0.3		Beira, Moçambique	
	41.44	7.5	YDP3	Medan, Indonesia	
	41.44	7.5/100		BBC, Malaysia	
	41.44	1.5	BEC28	Taipei, Taiwan	
7245	41.41	4/100	OEI33	Vienna, Austria	
	41.41	10/100/250		R. Free Europe, Germany	
	41.41	4		R. Mauritania, Mauritania	
	41.41	4		St. Denis, Réunion	
	41.41	20		Saigon, Vietnam	
7250	41.38	50		Tula, USSR	
	41.38	25/100		Vatican Radio	
	41.38	35/100		Tanger(VOA), Morocco	
	41.38	20/200		R. Japan, Japan	
	41.38	7.5/100		Dacca, Pakistan	
	41.38	7.5		R. Singapura, Singapore	
	41.38	10	BED21	Taipei(BCC), Taiwan	
7255	41.35	50		R. Sofia, Bulgaria	
	41.35	10/100/250		R. Free Europe, Germany	
	41.35	50		Vladivostok, USSR	
	41.35	10		Lagos, Nigeria	
	41.35	10/100	VUD	AIR Delhi, India	
	41.35	25	BED51	Taipei(BCC), Taiwan	
7260	41.32	75		BBC London, Gt. Britain	
	41.32	100		Trans World Radio, Monaco	
	41.32	50		Minsk, USSR	
	41.32	4		Dzaoudzi, Comores Islands	
	41.32	3.5	BEC71	Air Force St. Taiwan	
	41.32	50		Ulan Bator, Mongolia	
	41.32	0.5	YJB7	R. Port Vila, New Hebrides	
7265	41.29	120		R. Tirana, Albania	
	41.29	1.5	DMR32	Rohrdorf(SWF), Germany	
	41.29	50		Riazan, USSR	
	41.29	10		Addis Ababa, Ethiopia	
	41.29	50/100		Cairo, Un. Arab. Rep.	
	41.29	4/100		Lomé, Togo	
	41.29	5		Da Nang, Vietnam	
7270	41.27	250		Woofferton(VOA),Gt.Britain	
	41.27	100		Hörby, Sweden	
	41.27	50		Erevan, USSR	
	41.27	30		R. Gabon, Gabon	
	41.27	35/100		Tanger(VOA), Morocco	
	41.27	20/250		Paradys, So. Africa	
	41.27	10/100	VUD	AIR Delhi, India	
	41.27	20/10		R. Malaysia, Sarawak	
	41.27	1.5	BEC34	Taipei, Taiwan	

kc	m	kW	Call	Stations & countries	Rem.
7275	41.24	100	DMQ7	Deutsche Welle, Germany	
	41.24	50/60/100		R. Roma, Italy	
	41.24	10		Lagos(NBC), Nigeria	
	41.24	20		Paradys, So. Africa	
	41.24	10/35		Colombo(VOA), Ceylon	
	41.24	10/50		Karachi, Pakistan	
	41.24	7.5/100		Malolos(VOA), Philippines	
	41.24	7.5/100		Poro(VOA), Philippines	
7280	41.21	100		Allouis, France	
	41.21	100	DMQ7	Deutsche Welle, Germany	
	41.21	15		Komsomolsk, USSR	
	41.21	50		Moscow, USSR	
	41.21	250		Monrovia(VOA), Liberia	
	41.21	10		R. Tanzania, Tanzania	
	41.21	10		AIR Gauhati, India	
	41.21	10		R. Malaysia, Malaysia	
	41.21	0.5	DXH2	Mindanao Bc, Philippines	
	41.21	1.5		Taipei, Taiwan	
7285	41.18	100		Praha, Czechoslovakia	
	41.18	10/100/250		R. Free Europe, Germany	
	41.18	5/100		Warsaw, Poland	
	41.18	50		Khabarovsk, USSR	
	41.18	10		R.Comercial de Angola, Ang.	
	41.18	0.25	CR6RP	Novo Redondo, Angola	
	41.18	18		R. Mali, Mali	
	41.18	10		Ibadan(NBC), Nigeria	
	41.18	10/100	VUD	AIR Delhi, India	
	41.18	5	JKI	Tokyo(NHK), Japan	
7290	41.15	100	DMQ7	Deutsche Welle, Germany	
	41.15	50/60/100		R. Roma, Italy	
	41.15	100		Trans World Radio, Monaco	
	41.15	120		Moscow, USSR	
	41.15	5		Kisumu, Kenya	
	41.15	10/100	VUD	AIR Delhi, India	
7295	41.12	10/100/250		R. Free Europe, Germany	
	41.12	20/50		R. Liberty, Germany	
	41.12	250		Woofferton(VOA),Gt.Britain	
	41.12	35		Thessaloniki(VOA), Greece	
	41.12	50		Rhodes (VOA), Greece	
	41.12	50		Krasnoyarsk, USSR	
	41.12	50		Francistown, Botswana	
	41.12	20		Mbuji-Mayi, Congo Dem. R.	
	41.12	1		Menado, Indonesia	
	41.12	50		Malolos(VOA), Philippines	
7300	41.09	5		R.Berlin Int, Germany(GDR)	
	41.09	50		Petrozavodsk, USSR	
	41.09	10		R. Malaysia, Malaysia	
7305	41.07	50		Novosibirsk, USSR	
	41.07	2.5		Bangkok, Thailand	
7306	41.06	0.35		Pathfinders St, Poland	
				7310 – 9500 kc	
7310	41.04	50		Sverdlovsk, USSR	
7315	41.01	100		Peking, China	
7320	40.98	100		Minsk, USSR	
7325	40.96	15/100		BBC London, Gt. Britain	
	40.96	50		Orsha, USSR	
7330	40.93	50		Minsk, USSR	
**7335	40.90	3		Dominion Observatory, Cana.	
7340	40.87	50		Krasnoyarsk, USSR	
7345	40.85	100		Praha, Czechoslovakia	
7350	40.82	50		Minsk, USSR	
7360	40.76	100		Moscow, USSR	
7365	40.76	50		Ulan Bator, Mongolia	
**7397	40.45		GIC27	Hailsham, Gt. Britain	
**7428	40.39	6	FTH42	Paris, France	
7440	40.32	100		Moscow, USSR	
7443	40.31	25	HBX37	UN Geneva, Switzerland	
7450	40.27	1.75		Istanbul, Turkey	
7475	40.13	100		Petropavlovsk, USSR	
**7515	39.92	10/1	VNG	Lyndhurst, Australia	
7547	39.71		ZNX32	Bridgetown, Barbados	
7580	39.22	120/240		Pyongyang, Korea(Dem.Rep.)	
7620	39.37	1		Rajsima, Thailand	
7650	39.33	1		Erzurum, Turkey	
	39.33	1		Diyarbakir, Turkey	
7670	39.11	15		R. Sofia, Bulgaria	
7880	38.07	4		R. Université, Malagasy R.	
7888	38.04	0.4		R. Isfahan, Iran	
7935	37.81	20	PSL	Agencia Nacional, Brazil	
8000	37.50	0.2	VSI35	Grand Turk Islands	
8215	36.52	0.2		R. Shkodra, Albania	
**8478	35.39	10	VPH4	Belconnen, Australia	
**8634	34.74		PPR	Rio de Janeiro, Brazil	
**8638	34.72	10	DAM	Elmshorn, Germany	
**8721	34.40		PPE	Rio de Janeiro, Brazil	
9009	33.30	7.5/50	4XB31	Tel Aviv, Israel	
9104	32.95	7.5		Samarinda, Indonesia	

kc	m	kW	Call	Stations & countries	Rem.
9250	32.43	15		Alma Ata, USSR	
**9350	32.09		GIC29	Hailsham, Gt. Britain	
9360	32.05	50		R. Nacional, Spain	
9370	32.02	100		R. Nacional, Spain	
9380	31.98	15		Alma Ata, USSR	
9390	31.95	120		R. Tirana, Albania	
9410	31.88	15/100		BBC London, Gt. Britain	
9418	31.86	20		Deragawa (VUNC), Ryuk. I.	
9457	31.77	240		Peking, China	
9460	31.76	50/100		Cairo, Un. Arab Rep.	
9470	31.58	100		Moscow, USSR	
9475	31.66	50/100		Cairo, Un. Arab Rep.	
9480	31.65	50		Komsomolsk, USSR	
9485	31.62	7.5	4VC	Voix Révolution Duv, Haiti	
9490	31.61	50		Baku, USSR	
9495	31.60	50/100		Cairo, Un. Arab Rep.	
				9500–9775kc (31 metre band)	
9500	31.58	50		R. Berlin Int, Germ. (GDR)	
	31.58	100		Magadan, USSR	
	31.58	1	CE950	Corp. Chilena Bc, Chile	
9504	31.56	1	OAX8E	R. Loreto, Peru	
9505	31.56	100		Praha, Czechoslovakia	
	31.56	10/100/250		R. Free Europe, Germany	
	31.56	50		R. Belgrade, Yugoslavia	
	31.56	100		R. Japan, Japan	
	31.56	50	DZH7	Call of the Orient, Philipp.	
	31.56	50		R. TV Dominicana, Dom. R.	
	31.56	5	CP38	R. Altiplano, Bolivia	
	31.56	7.5/50	PRB22	R. Record, Brazil	
	31.56	0.2	OAX6H	R. Tacna, Peru	
9508	31.55	50		Omdurman, Sudan	
9510	31.55	75		BBC London, Gt. Britain	
	31.55	120		R. Bucharest, Rumania	
	31.55	50		Alger, Algeria	
	31.55	2.5	OAX4W	R. América, Peru	
	31.55	10	YVXJ	R. Barquisimeto, Venezuela	
9515	31.53	5		Caltanisetta, Italy	
	31.53	50		Krasnoyarsk, USSR	
	31.53	1	CR6RM	Moçamedes, Angola	
	31.53	50/100		Cairo, Un. Arab Rep.	
	31.53	10		R. Malaysia, Malaysia	
	31.53	100	TAT	R. Ankara, Turkey	
	31.53	10	XEWW	Voz de la Am. Lat. Mexico	
	31.53	10	CXA71	R. Sarandi, Uruguay	
9520	31.51	50	OZF5	R. Denmark, Denmark	
	31.51	10/100/250		R. Free Europe, Germany	
	31.51	20/50		R. Liberty, Germany	
	31.51	100		Leningrad, USSR	
	31.51	1/10/50		R. Kuwait, Kuwait	
	31.51	10	VLT9	Port Moresby, N. Guinea	
	31.51	7.5	ZL18	Wellington, N. Zealand	
	31.51	1	CF952	R. El Morro, Chile	
	31.51	5	OAX4J	R. La Crónica, Peru	
9525	31.50	20/100	OEI49	Vienna, Austria	
	31.50	100		Allouis, France	
	31.50	15/100		BBC London, Gt. Britain	
	31.50	50/100		R. Nederland, Holland	
	31.50	5/100		Warsaw, Poland	
	31.50	20/250		Paradys, So. Africa	
	31.50	200		R. Japan, Japan	
	31.50	50/500		Greenville, USA	
9530	31.48	100	DMQ9	Deutsche Welle, Germany	
	31.48	50		Irkutsk, USSR	
	31.48	120		Moscow, USSR	
	31.48	5		R. Tanzania, Tanzania	
	31.48	7.5/100		BBC, Cyprus	
	31.48	20/200		R. Japan, Japan	
	31.48	100		Amman, Jordan	
	31.48	35		Poro (VOA), Philippines	
	31.48	50/500		Greenville, USA	
	31.48	0.3	OAX6G	R. Nacional Tacna, Peru	
	31.48	1	YVMZ	Maracaibo, Venezuela	
9535	31.46	250		Schwarzenburg, Switzerland	
	31.46	50		Simferopol. USSR	
	31.46	10	CR6RZ	R. Angola, Angola	
	31.46	10/100	VUD	AIR Delhi, India	
	31.46	20/10		R. Malaysia, Sarawak	
9540	31.45	5/135		R. Budapest, Hungary	
	31.45	50/60/100		R. Roma, Italy	
	31.45	5/100		Warsaw, Poland	
	31.45	50		Krasnoyarsk, USSR	
	31.45	50		Petropavlovsk, USSR	
	31.45	10		Lubumbashi, Congo D. Rep.	
	31.45	35/100		Tanger (VOA), Morocco	
	31.45	50		R. Ulan Bator, Mongolia	
	31.45	100		R. Australia, Australia	
	31.45	7.5	ZL2	Wellington, N. Zealand	

kc	m	kW	Call	Stations & countries	Rem.
9545	31.43	100	DMQ9	Deutsche Welle, Germany	
	31.43	100		Munich (VOA), Germany	
	31.43	20		Moscow, USSR	
	31.43	25/100		Vatican Radio	
	31.43	100/250		Accra, Ghana	
	31.43	100		Beyrouth, Lebanon	
	31.43	100		Islamabad, Pakistan	
	31.43	0.25	XEFT	La Voz de V. Cruz, Mexico	
	31.43	200		Delano, USA	
	31.43	7.5	ZYZ43	R. Emis. Paranaense, Brazil	
	31.43	0.5	OAX4K	R. Central, Peru	
9550	31.41	100		Praha, Czechoslovakia	
	31.41	10/120	LLD	R. Norway, Norway	
	31.41	10		Tromsö, Norway	
	31.41	50/100		Cairo, Un. Arab Rep.	
	31.41	10		R. Tanzania, Tanzania	
	31.41	10/100	VUD	AIR Delhi, India	
	31.41	7.5		Makassar, Indonesia	
	31.41	120/240		R. Habana, Cuba	
	31.41	1	YNTZ	R. Jinotega, Nicaragua	
	31.41	5		Grenada, Windward Isl.	
	31.41	1	CE955	R. Valentin Letelier, Chile	
	31.41	2.5	OAX1Z	R. Nacional Tumbes, Peru	
	31.41			Male Sinicor, Maldive Isl.	
9555	31.40	15	OIX2	Pori, Finland	
	31.40	20/50		R. Liberty, Germany	
	31.40	50/75		BBC London, Gt. Britain	
	31.40	10		BBC Monrovia, Liberia	
	31.40	50		Baghdad, Iraq	
	31.40	50		Damascus, Syria	
	31.40	5	YSS	R. Nacional, El Salvador	
	31.40	1	XETT	La Hora Exacta, Mexico	
	31.40	10	CP6	R. Emis. del Estado, Bolivia	
9560	31.38	50		R. Sofia, Bulgaria	
	31.38	100		Praha, Czechoslovakia	
	31.38	100		Allouis, France	
	31.38	25/100		Vatican Radio	
	31.38	100		Amman, Jordan	
	31.38	100		R. Japan, Japan	
	31.38	7.5/100		BBC, Malaysia	
	31.38	100		Islamabad, Pakistan	
	31.38	50		R. Australia, Australia	
	31.38	500		Greenville, USA	
	31.38	10	CE956	Diego Portales, Chile	
9562	31.37	40	OAX4R	R. Nacional Lima, Peru	
9565	31.36	100	ETLF	Addis Ababa, Ethiopia	
	31.36	100		Tripoli, Libya	
	31.36	250		Kigali (DW), Rwanda	
	31.36	20/10		R. Malaysia, Sarawak	
	31.36	200		Dixon, USA	
	31.36	250/500		Greenville, USA	
9570	31.35	100		Allouis, France	
	31.35	50		R.BerlinInt,Germany(GDR)	
	31.35	15/100		BBC London, Gt. Britain	
	31.35	120		R. Bucharest, Rumania	
	31.35	100		R. Nacional, Spain	
	31.35	100		Riazan, USSR	
	31.35	20		Lusaka, Zambia	
	31.35	7.5/100		BBC, Malaysia	
	31.35	100		R. Australia, Australia	
	31.35	1	OAX7F	R. Nacional Puno, Peru	
	31.35	1	YVOM	San Cristóbal, Venezuela	
9575	31.33	100	DMQ9	Deutsche Welle, Germany	
	31.33	50/60/100		R. Roma, Italy	
	31.33	10/100	VUD	AIR Delhi, India	
9580	31.32	75		BBC London, Gt. Britain	
	31.32	50		Kazan, USSR	
	31.32	50/100		Cairo, Un. Arab Rep.	
	31.32	100		R. Japan, Japan	
	31.32	7.5/100		BBC, Malaysia	
	31.32	50		Malolos (VOA), Philipp.	
	31.32	100		R. Australia, Australia	
9585	31.30	100		Allouis, France	
	31.30	50/100		Cairo, Un. Arab Rep.	
	31.30	50	ZYR56	R. Excelsior, Brazil	
	31.30	0.5	OBX4K	R. Selecta, Peru	
9590	31.28	50/100		R. Nederland, Holland	
	31.28	120		R. Bucharest, Rumania	
	31.28	50		Starobelsk, USSR	
	31.28	50		Omsk, USSR	
	31.28	50		Poro (VOA), Philippines	
	31.28	500		Greenville, USA	
	31.28	260		TWR Bonaire, N. Antilles	
	31.28	0.2	OAX5C	R. Ica, Peru	
9595	31.27	10/100/250		R. Free Europe, Germany	
	31.27	100		Schwarzenburg, Switzerland	
	31.27	50/100		Cairo, Un. Arab Rep.	

kc	m	kW	Call	Stations & countries	Rem.
9595	31.27	10/50	JOZ3	Tokyo, Japan	
	31.27	20	ZYN29	R. Cult. da Bahia, Brazil	
	31.27	10	CXA72	R. Monte Carlo, Uruguay	
9600	31.25	100		R. Berlin Int, Germ. (GDR)	
	31.25	75		BBC London, Gt. Britain	
	31.25	50		Tashkent, USSR	
	31.25	100		Moscow, USSR	
	31.25	50		R. Nac. España, Canary Isl.	
	31.25	50/250		Monrovia (VOA), Liberia	
	31.25	7.5/100		BBC, Cyprus	
	31.25	10/100	VUD	AIR Delhi, India	
	31.25	1	XEYU	Universidad Nac, Mexico	
	31.25	10	CE960	R. Pres. Balmaceda, Chile	
	31.25	0.5	OAX3E	R. Huaraz, Peru	
9605	31.23	100	DMQ9	Deutsche Welle, Germany	
	31.23	10/100/250		R. Free Europe, Germany	
	31.23	50		Irkutsk, USSR	
	31.23	50/100		Cairo, Un. Arab Rep.	
	31.23	10/100	VUD	AIR Delhi, India	
	31.23	100		R. Japan, Japan	
	31.23	20		Damascus, Syria	
	31.23	50		TWR Bonaire, N. Antilles	
	31.23	5	CP22	R. Prefectura, Bolivia	
9610	31.22	10		Vienna, Austria	
	31.22	100	DMQ9	Deutsche Welle, Germany	
	31.22	20/50		R. Liberty, Germany	
	31.22	5/120	LLG	R. Norway, Norway	
	31.22	50		Tula, USSR	
	31.22	10		Addis Ababa, Ethiopia	
	31.22	30		R. Mauritania, Mauritania	
	31.22	10/50	VLW/X9	Perth, Australia	
	31.22	10	ZYC8	R. Tupi, Brazil	
	31.22	1	OAX8C	R. Nacional Iquitos, Peru	
9612	31.21	1	CR6RI	R. Diamang, Angola	
9615	31.20	100	ORU4	Wavre, Belgium	
	31.20	25/100		Vatican Radio	
	31.20	4		R. Tchad, Chad	
	31.20	50/100		Cairo, Un. Arab Rep.	
	31.20	100		Tanger, Morocco	
	31.20	100		Tanger (VOA), Morocco	
	31.20	100		Poro (VOA), Philippines	
	31.20	35		Okinawa (VOA), Ryukyu Is.	
	31.20	20/10		R. Malaysia, Sarawak	
	31.20	50/80	WNYW	R. New York, USA	
	31.20	3	TIRICA	Voz de la Victor, Costa Rica	
9618	31.19	0.4	OBX7E	R. El Sol, Peru	
9620	31.19	100		Allouis, France	
	31.19	100		TWR, Monaco	
	31.19	50		Krasnoyarsk, USSR	
	31.19	50		R. Belgrade, Yugoslavia	
	31.19	50/200		Saigon, Vietnam	
	31.19	10	ZYR96	R. 9 de Julho, Brazil	
	31.19	20	CXA6	S.O.D.R.E, Uruguay	
9625	31.17	75		BBC London, Gt. Britain	
	31.17	100		Hörby, Sweden	
	31.17	120		Moscow, USSR	
	31.17	7.5/100		BBC, Cyprus	
	31.17	100	4XB51	Tel Aviv, Israel	
	31.17	50		R. Canada, Canada	
	31.17	1	OAX8K	R. Atlántida, Peru	
9630	31.15	50/100		R. Nederland, Holland	
	31.15	50/60/100		R. Roma, Italy	
	31.15	100		TWR, Monaco	
	31.15	50		Serpukhov, USSR	
	31.15	1	CR6RL	R. Cl. de Angola, Angola	
	31.15	100/100	VUD	AIR Delhi, India	
	31.15	100		Islamabad, Pakistan	
	31.15	50	DYH5	Dumaguete City, Philipp.	
	31.15	3	BED33	Chiayi (BCC), Taiwan	
	31.15	50		R. Canada, Canada	
9635	31.14	10/100/250		R. Free Europe, Germany	
	31.14	75		BBC London, Gt. Britain	
	31.14	50/100	CSA23	R. Nacional, Portugal	
	31.14	50		Vladivostok, USSR	
	31.14	50		R. Afghanistan, Afghanistan	
	31.14	50		Baghdad, Iraq	
	31.14	50		R. Singapura, Singapore	
	31.14	50/500		Greenville, USA	
	31.14	0.25	4VU	R. Lumière, Haiti	
	31.14	7.5	ZYR83	R. Aparecida, Brazil	
	31.14	25	HJZM	R. Nacional, Colombia	
	31.14	1	OCX4K	R. Expreso, Peru	
9640	31.12	100	DMQ9	Deutsche Welle, Germany	
	31.12	75		BBC London, Gt. Britain	
	31.12	20/120		Moscow, USSR	
	31.12	50		Vladivostok, USSR	
	31.12	50/100		Cairo, Un. Arab Rep.	

kc	m	kW	Call	Stations & countries	Rem.
9640	31.12	50		Seoul, Korea	
	31.12	10/50		Karachi, Pakistan	
	31.12	250		Greenville, USA	
	31.12	2.5	YVPG	Ecos del Torbes, Venezuela	
	31.12	10	YVSC	R. Nacional, Venezuela	
9645	31.10	10/120	LLH	R. Norway, Norway	
	31.10	25/100		Vatican Radio	
	31.10	10/50		Karachi, Pakistan	
	31.10	2	TIFC	Faro del Caribe, C. Rica	
	31.10	7.5	ZYV40	R. Cultura de Poços, Brazil	
	31.10	30	HCJB	La Voz de los Andes, Ecuad.	
	31.10	0.5	OAX1T	R. Grau, Peru	
9650	31.09	100		R. Berlin Int, Germ. (GDR)	
	31.09	15/100		BBC London, Gt. Britain	
	31.09	15/100		Moscow, USSR	
	31.09	50		Conakry, Guinea Rep.	
	31.09	20		Paradys, So. Africa	
	31.09	7.5/100		BBC, Cyprus	
	31.09	110		Bethany, USA	
	31.09	1	CE965	R. Yungay, Chile	
9655	31.07	10/100/250		R. Free Europe, Germany	
	31.07	100		Schwarzenburg, Switzerland	
	31.07	10		Kaduna (NBC), Nigeria	
	31.07	250		Kigali (DW), Rwanda	
	31.07	5	JKH2	Tokyo, Japan	
	31.07	50		Malolos (VOA), Philippines	
	31.07	10	BED91	Taipei (BCC), Taiwan	
	31.07	120/240		R. Habana, Cuba	
9660	31.05	20/50		R. Liberty, Germany	
	31.06	15/100		BBC London, Gt. Britain	
	31.06	1	CR6RD	Nova Lisboa, Angola	
	31.06	100	ETLF	Addis Ababa, Ethiopia	
	31.06	250		Monrovia (VOA), Liberia	
	31.06	35/100		Tanger (VOA), Morocco	
	31.06	10	VLQ9	Brisbane, Australia	
	31.06	5	LRX	R. El Mundo, Argentina	
9665	31.04	100		Schwarzenburg, Switzerland	
	31.04	50		Omsk, USSR	
	31.04	10/100	VUD	AIR Delhi, India	
	31.04	50		Poro (VOA), Philippines	
	31.04	50		Dixon, USA	
	31.04	10	PRL8	R. Nac. Brasilia, Brazil	
	31.04	1	OAX8U	R. El Eco, Peru	
9667	31.03	100		Colombo, Ceylon	
9668	31.03	5	TGNB	R. Cultural, Guatemala	
9670	31.02	10/100/250		R. Free Europe, Germany	
	31.02	15/100		BBC London, Gt. Britain	
	31.02	50/100		R. Nacional, Portugal	
	31.02	100		Schwarzenburg, Switzerland	
	31.02	35/100		Tanger (VOA), Morocco	
	31.02	200		R. Japan, Japan	
	31.02	50		Jeddah, Saudi Arabia	
	31.02	5		Huế, Vietnam	
	31.02	500		Greenville, USA	
9675	31.01	100	DMQ9	Deutsche Welle, Germany	
	31.01	5/100		Warsaw, Poland	
	31.01	20/250		R. South Africa, So. Africa	
	31.01	20/200		R. Japan, Japan	
	31.01	10	ZYT29	R. Diário da Manha, Brazil	
	31.01	7.5	OAZ4L	R. del Pacifico, Peru	
9680	30.99	20/50		R. Liberty, Germany	
	30.99	250		Kigali (DW), Rwanda	
	30.99	20		Paradys, So. Africa	
	30.99	10	VLH/R9	Melbourne, Australia	
9685	30.98	100	DMQ9	Deutsche Welle, Germany	
	30.98	120		Moscow, USSR	
	30.98	50		Alger, Algeria	
	30.98	50/100		Cairo, Un. Arab Rep.	
	30.98	25	BED73	Taipei (BBC), Taiwan	
	30.98	50/80	WNYW	R. New York, USA	
	30.98	120/240		R. Habana, Cuba	
	30.98	1	HOF31	Onda Popular, Panama	
	30.98	7.5	ZYR227	R. Gazeta, Brazil	
9690	30.96	75		BBC London, Gt. Britain	
	30.96	100/250		Accra, Ghana	
	30.96	10		Lagos (NBC), Nigeria	
	30.96	7.5/100		BBC, Cyprus	
	30.96	10/100	VUD	AIR Delhi, India	
	30.96	7.5/100		BBC, Malaysia	
	30.96	7.5/100		Dacca, Pakistan	
	30.96	10	BED72	Taipei (BCC), Taiwan	
	30.96	100	LRA32	R. Nacional, Argentina	
9695	30.94	10/100/250		R. Free Europe, Germany	
	30.94	100		Schwarzenburg, Switzerland	
	30.94	25/100		Vatican Radio	
	30.94	50		R. Cambodge, Cambodia	
	30.94	20/200		R. Japan, Japan	

kc	m	kW	Call	Stations & countries	Rem.
9695	30.94	0.25	ZK3	Rarotonga, Cook Islands	
	30.94	50/500		Greenville, USA	
	30.94	50/80	WNYW	R. New York, USA	
	30.94	7.5	ZYB22	R. Rio Mar, Brazil	
	30.94	1	OCX4Y	R. Continente, Peru	
9700	30.93	120		R. Sofia, Bulgaria	
	30.93	100		R. Japan, Japan	
	30.93	35		Poro (VOA), Philippines	
	30.93	100		Delano, USA	
	30.93	10	CE970	La Voz de Chile, Chile	
9705	30.91	10/100/250		R. Free Europe, Germany	
	30.91	100		Hörby, Sweden	
	30.91	100	ETLF	Addis Ababa, Ethiopia	
	30.91	10/100	VUD	AIR Delhi, India	
	30.91	20/200		R. Japan, Japan	
	30.91	10	ZYA24	R. Maua, Brazil	
9710	30.90	10/100/250		R. Free Europe, Germany	
	30.90	35		Thessaloniki, Greece	
	30.90	50/60/100		R. Roma, Italy	
	30.90	50		Khabarovsk, USSR	
	30.90	50		Kiev, USSR	
	30.90	10		Forest Side, Mauritius	
	30.90	100		Beyrouth, Lebanon	
	30.90	50/500		Greenville, USA	
	30.90	50		TWR Bonaire, N. Antilles	
	30.90	6	LRX2	R. El Mundo, Argentina	
	30.90	1	OAX9D	R. Tropical, Peru	
9715	30.88	100	DMQ9	Deutsche Welle, Germany	
	30.88	10/100/250		R. Free Europe, Germany	
	30.88	250		Woofferton (VOA), G. Brit.	
	30.88	50/100		R. Nederland, Holland	
	30.88	50		R. TV Congolaise, Congo	
	30.88	50/100		Cairo, Un. Arab Rep.	
	30.88	10/2	DZF5	Call of the Orient, Philipp.	
	30.88	50		R. St. KGEI, USA	
	30.88	1	CP21	R. La Plata, Bolivia	
9720	30.86	10/100/250		R. Free Europe, Germany	
	30.86	120		Riazan, USSR	
	30.86	20/250		Paradys, So. Africa	
	30.86	35		Colombo, Ceylon	
	30.86	50		Riyadh, Saudi Arabia	
	30.86	0.2		Nhatrang, Vietnam	
	30.86	50	PRL7	R. Nacional, Brazil	
	30.86	1	OCX4C	R. Victoria, Peru	
9725	30.85	10/100/250		R. Free Europe, Germany	
	30.85	15/100		BBC London, Gt. Britain	
	30.85	50		Irkutsk, USSR	
	30.85	100	4XB51	Tel Aviv, Israel	
	30.85	7.5/100		BBC, Malaysia	
	30.85	50		Greenville, USA	
9730	30.83	50		R. Berlin Int, Germ. (GDR)	
	30.83	50/100		R. Nederland, Holland	
	30.83	15		R. Brazzaville, Congo	
	30.83	10/100	VUD	AIR Delhi, India	
	30.83	7.5	ZYU59	R. Soc. Farroupilha, Brazil	
9735	30.82	75		BBC London, Gt. Britain	
	30.82	50		Nikolaievsk, USSR	
	30.82	30		R. Niger, Niger	
	30.82	250		Kigali (DW), Rwanda	
9740	30.80	20/100	ORU3/5	Wavre, Belgium	
	30.80	250		Woofferton (VOA), Gt. Brit.	
	30.80	10/100	VUD	AIR Delhi, India	
	30.80	20/200		R. Japan, Japan	
	30.80	100		Amman, Jordan	
	30.80	15		Okinawa (VOA), Ryukyu Isl.	
	30.80	50/80	WNYW	R. New York, USA	
	30.80	10	LRS1	R. Splendid, Argentina	
9745	30.78	20	ORU5	Wavre, Belgium	
	30.78	50/100		R. Nederland, Holland	
	30.78	100		Moscow, USSR	
	30.78	50		R. Mali, Mali	
	30.78	5	8FW30	Sukarnopura, Indonesia	
	30.78	3.5	BEC62	Air Force St, Taiwan	
	30.78	20	TAP	R. Ankara, Turkey	
	30.78	7.5	ZYR57	R. Cultura, Brazil	
	30.78	1/30	HCJB	La Voz de Los Andes, Ecuad.	
9750	30.77	10/100/250		R. Free Europe, Germany	
	30.77	20/50		R. Liberty, Germany	
	30.77	10/50		Karachi, Pakistan	
	30.77	50		R. Malaysia, Malaysia	
	30.77	10	HJGQ	Accion Cult. Popular, Colom.	
	30.77	2.1	OAX8W	R. Sideral, Peru	
	30.77	1	YVOS	R. Tovar, Venezuela	
9752	30.77	5	PZC	R. Suriname, Surinam	
9755	30.75	100		Allouis, France	
	30.75	50/100		R. Nederland, Holland	
	30.75	50/100		Cairo, Un. Arab Rep.	

kc	m	kW	Call	Stations & countries	Rem.
9755	30.75	10		Saigon, Vietnam	
	30.75	1	ZYW23	R. Anhanguera, Brazil	
9760	30.74	100		Munich (VOA), Germany	
	30.74	15/100		BBC London, Gt. Britain	
	30.74	50		R. Nacional, Spain	
	30.74	100/250		Accra, Ghana	
	30.74	100		Islamabad, Pakistan	
	30.74	0.3		Diyarbakir, Turkey	
	30.74			Hanoi, Vietnam (D. Rep.)	
	30.74	50/200		Delano, USA	
	30.74	50		Greenville, USA	
	30.74	10	TGWA	La Voz de Guatemala, Guat.	
	30.74	1	OAX6D	R. Continental, Peru	
9765	30.72	75		BBC London, Gt. Britain	
	30.72	100		Leningrad, USSR	
	30.72	250		Kigali(DW), Rwanda	
	30.72	10/100	VUD	AIR Delhi, India	
	30.72	20/200		R. Japan, Japan	
	30.72	50	BED66	Taipei(BCC), Taiwan	
9770	30.71	4/20/100	OEI47	Vienna, Austria	
	30.71	75		BBC London, Gt. Britain	
	30.71	100		Vladivostok, USSR	
	30.71	20		Djakarta, Indonesia	
	30.71	0.3		Iskenderun, Turkey	
	30.71	50		Greenville, USA	
	30.71	0.35	4VEH	R. St. 4VEH, Haiti	
	30.71	7,5	PRL4	R. Dif. Educação, Brazil	
	30.71	1	OAX8O	R. Amazonas, Peru	
			9775 – 11700 kc		
9775	30.69	10		Kinshasa, Congo Dem. Rep.	
9780	30.67	50		Erevan, USSR	
9785	30.66	50		Jigulevsk, USSR	
9790	30.64	50/100		Cairo, Un. Arab. Rep.	
9795	30.63	100		Praha, Czechoslovakia	
9800	30.61	50		Kazan, USSR	
9810	30.58	50		Moscow, USSR	
	30.58	10/50		Karachi, Pakistan	
9815	30.57	50/100		Cairo, Un. Arab. Rep.	
9817	30.56	50		R. Sofia, Bulgaria	
9825	30.53	15/100		BBC London, Gt. Britain	
9833	30.51	5/135		R. Budapest, Hungary	
9840	30.49	50		Baku, USSR	
	30.49			Hanoi, Vietnam(Dem.Rep.)	
9860	30.43	240		Peking, China	
9865	30.40	50	YDF6	Djakarta, Indonesia	
9905	30.29	50		Khabarovsk, USSR	
9915	30.26	15/100		BBC London, Gt. Britain	
	30.26	10/100	VUD	AIR Delhi, India	
*10000	30.00	0.5	MSF	Teddington, Gt. Britain	
*	30.00	20	RWM	Moscow, USSR	
**	30.00	0.25	ZUO	Johannesburg, So.Africa	
*	30.00		BVP	Peking, China	
*	30.00	2	ATA	New Delhi, India	
*	30.00	2	JJY	Tokyo, Japan	
*	30.00	2	WWVH	Puunene, Hawaii	
*	30.00	10	WWH	Lanham, USA	
**	30.00	2	LOL	Buenos Aires, Argentina	
10220	29.25	20	PSH	Agencia Nacional, Brazil	
**10331	29.05		GPB30B	Hailsham, Gt. Britain	
**10332	29.04		GPB30A	Hailsham, Gt. Britain	
10335	29.03	10/100	VUD	AIR Delhi, India	
10530	28.50			Alma Ata, USSR	
**10775	27.84	6	FTK77	Paris, France	
10885	27.60	25		Ulan Bator, Mongolia	
11015	27.25		ZNX49	Bridgetown, Barbados	
11570	25.93	50		Moscow, USSR	
11590	25.88	10/50		Karachi, Pakistan	
11640	25.88	5		R. Hargeisa, Somalia	
	25.77			Hanoi, Vietnam (Dem.Rep.)	
11655	25.74	50/100		Cairo, Un. Arab Rep.	
11672	25.70	10/50		Karachi, Pakistan	
11680	25.68	15/100		BBC London, Gt. Britain	
11685	25.67	1	CR6RR	R. Diamang, Angola	
11690	25.66	50		Erevan, USSR	
	25.66	240		Peking, China	
11695	25.65	50		Taskhent, USSR	
			11700 – 11975 (25 metre band)		
11700	25.64	50/100		Leningrad, USSR	
	25.64	120		Serpukhov, USSR	
	25.64	1	TGQB	Voz de Quezaltenango, Guate.	
11705	25.63	50/100		R.Berlin Int, Germany(GDR)	
	25.63	100		Hörby, Sweden	
	25.63	120		Serpukhov, USSR	
	25.63	25/100		Vatican Radio	
	25.63	100		R. Iran, Iran	
	25.63	100		R. Japan, Japan	
11710	25.62	250		Woofferton(VOA),Gt.Britain	
11710	25.62	50/100		R. Nederland, Holland	
	25.62	50		R. Brazzaville, Congo	
	25.62	35		Tanger(VOA). Morocco	
	25.62	50/100		Cairo, Un.Arab Rep.	
	25.62	10/100	VUD	AIR Delhi, India	
	25.62	100		R. Australia, Australia	
	25.62	50		R. St. KGEI, USA	
	25.62	100	LRA35	R. Nacional, Argentina	
11715	25.61	20/100	ORU3/5	Wavre, Belgium	
	25.61	100		R. Nacional, Spain	
	25.61	100		Schwarzenburg, Switzerland	
	25.61	50		Dushanbe, USSR	
	25.61	100		Alger, Algeria	
	25.61	10/100	VUD	AIR Delhi, India	
	25.61	50	YDF2	Djakarta, Indonesia	
	25.61	100		Okinawa(VOA), Ryukyu Isl.	
11720	25.60	15/100		BBC London, Gt. Britain	
	25.60	50		Sverdlovsk, USSR	
	25.60	10/50	9Q2AA	R.Leo, Congo Dem. Rep.	
	25.60	7.5/100		BBC, Cyprus	
	25.60	10/100	VUD	AIR Delhi, India	
	25.60	50		R. Canada, Canada	
	25.60	10	PRL8	R. Nacional Brasilia, Brazil	
11725	25.59	10/100/250		R. Free Europe, Germany	
	25.59	20/50		R. Liberty, Germany	
	25.59	50		R. Brazzaville, Congo	
	25.59	20/200		R. Japan, Japan	
	25.59	7.5/100		BBC, Malaysia	
	25.59	50	BED75	Taipei(BCC), Taiwan	
11730	25.58	50/100		R. Nederland, Holland	
	25.58	10/100	VUD	AIR Delhi, India	
	25.58	35		Poro(VOA), Philippines	
11735	25.56	10/100/250		R. Free Europe, Germany	
	25.56	120	LKJ	R. Norway, Norway	
	25.56	10		Tromsö, Norway	
	25.56	50		Vinnitsa, USSR	
	25.56	100		R. Belgrade, Yugoslavia	
	25.56	100/250		Accra, Ghana	
	25.56	50		Tanger, Morocco	
	25.56	35/100		Tanger(VOA), Morocco	
	25.56	15		Poro(VOA), Philippines	
	25.56	7.5	ZYW28	R. Cl. de Goiania, Brazil	
	25.56	5	CXA7	R. Oriental, Uruguay	
11740	25.55	15/50		Novosibirsk, USSR	
	25.55	25/100		Vatican Radio	
	25.55	35/100		Tanger(VOA), Morocco	
	25.55	240		Peking, China	
	25.55	10/100	VUD	AIR Delhi, India	
	25.55	2	DZF6	Call of the Orient, Philipp.	
	25.55	100		R. Australia, Australia	
	25.55	50/80	WNYW	R. New York, USA	
	25.55	1	XEMP	R. Dif.XEMP, Mexico	
	25.55	5	CE1174	R. Nuevo Mundo, Chile	
11745	25.54	10/100/250		R. Free Europe, Germany	
	25.54	50		Minsk, USSR	
	25.54	50/100		Cairo, Un. Arab Rep.	
	25.54	10	ZYR65	R. Piratininga, Brazil	
11750	25.53	75		BBC London, Gt. Britain	
	25.53	50		R. Mali, Mali	
	25.53	1.5	YDQ2	Makassar, Indonesia	
	25.53	1/10		Tokyo(FEN), Japan	
	25.53	7.5/100		BBC, Malaysia	
	25.53	0.5	TGRA	R. Modelo, Guatemala	
11755	25.52	10/100/250		R. Free Europe, Germany	
	25.52	50/100		R. Nederland, Holland	
	25.52	100		Leningrad, USSR	
	25.52	50		Vladivostok, USSR	
	25.52	0.2	CR6RB	R. Ecclesia, Angola	
	25.52	10/100	VUD	AIR Delhi, India	
	25.52	25	ZYB8	R. Dif. São Paulo, Brazil	
11760	25.51	100		Vienna, Austria	
	25.51	50		R.Berlin Int, Germany(GDR)	
	25.51	10/100/250		R. Free Europe, Germany	
	25.51	15/100		BBC London, Gt. Britain	
	25.51	25/100		Vatican Radio	
	25.51	10/100	VUD	AIR Delhi, India	
	25.51			Hanoi, Vietnam(Dem. Rep.)	
	25.51	0.25	ZK4	R. Rarotonga, Cook Islands	
	25.51	50/500		Greenville, USA	
	25.51	120/240		R. Habana, Cuba	
11765	25.50	100		R. Sofia, Bulgaria	
	25.50	50/100		R.Berlin Int, Germany(GDR)	
	25.50	120/240		Pyongyang, Korea(PDR)	
11770	25.49	20/50		R. Liberty, Germany	
	25.49	100		Schwarzenburg, Switzerland	
	25.49	10/100	VUD	AIR Delhi, India	
	25.49	20	YDE	Djakarta, Indonesia	

kc	m	kW	Call	Stations & countries	Rem.
11770	25.49	50/500		Greenville, USA	
	25.49	30	HCJB	La Voz de los Andes, Ecuador	
11775	25.48	100	DMQ11	Deutsche Welle, Germany	
	25.48	10/100/250		R. Free Europe, Germany	
	25.48	100		Schwarzenburg, Switzerland	
	25.48	50		Kursk, USSR	
	25.48	50		Poro(VOA), Philippines	
	25.48	10	ZYZ28	R. Mayrink Veiga, Brazil	
11780	25.47	75		BBC London, Gt. Britain	
	25.47	50/100		R. Nederland, Holland	
	25.47	5/100		R. Clube de Moçambique	
	25.47	10/100	VUD	AIR Delhi, India	
	25.47	100		R. Japan, Japan	
	25.47	100		R. Australia, Australia	
	25.47	7.5	ZL3	Wellington, New Zealand	
	25.47	0.025	TGIZ	Voz de la Marimba, Guatema.	
	25.47	8/10	LRY2	R. Belgrano, Argentina	
11785	25.46	4/100		Vienna, Austria	
	25.46	50/100		R.Berlin Int,Germany(GDR)	
	25.46	100	DMQ11	Deutsche Welle, Germany	
	25.46	50		Vinnitsa, USSR	
	25.46	25/100		Vatican Radio	
	25.46	100	ETLF	Addis Ababa, Ethiopia	
	25.46	20/250		R.South Africa, So.Africa	
	25.46	7.5	ZYU61	R. Guaiba, Brazil	
11790	25.45	250		Wofferton(VOA),Gt.Britain	
	25.45	50		Blagovechensk, USSR	
	25.45	50		Riazan, USSR	
	25.45	100		Kinshasa, Congo (Dem.Rep.)	
	25.45	35/100		Tanger(VOA), Morocco	
	25.45	100		R. Australia, Australia	
	25.45	100		Delano, USA	
	25.45	50/80	WNYW	R. New York; USA	
11795	25.43	100	DMQ11	Deutsche Welle, Germany	
	25.43	50	WINB	Red Lion, USA	
	25.43	10	PRL3	R. Nacional Rio, Brazil	
11800	25.42	50/100		R. Nederland, Holland	
	25.42	50/60/100		R. Roma, Italy	
	25.42	50		R. Nac.Espana,Canary Isl.	
	25.42	100/250		Accra, Ghana	
	25.42	35		Colombo, Ceylon	
	25.42	20/200		R. Japan, Japan	
11805	25.41	10	OIX8	Pori, Finland	
	25.41	10/100/250		R. Free Europe, Germany	
	25.41	50		Kazan, USSR	
	25.41	50		Tanger(VOA), Morocco	
	25.41	50/100		Cairo, Un.Arab Rep.	
	25.41	100		Poro (VOA), Philippines	
	25.41	50		Delano, USA	
	25.41	10	ZYZ36	R. Globo, Brazil	
11810	25.40	50/60/100		R. Roma, Italy	
	25.40	120		R. Bucharest, Rumania	
	25.40	100		Hörby, Sweden	
	25.40	100		Schwarzenburg, Switzerland	
	25.40	100		Simferopol, USSR	
	25.40	50		Alger, Algeria	
	25.40	100	ETLF	Addis Ababa, Ethiopia	
	25.40	10/100	VUD	AIR Delhi, India	
	25.40	5		Amman, Jordan	
	25.40	100		R. Australia, Australia	
	25.40	50		R. Canada, Canada	
	25.40	5	CE1181	R.Soc.Nac.Agricultura,Chile	
11815	25.39	10/100/250		R. Free Europe, Germany	
	25.39	50		R. Mali, Mali	
	25.39	20/200		R. Japan, Japan	
	25.39	50/260		TWR.Bonaire,Neth.Antilles	
	25.39	7.5	ZYW24	R. Brazil Central, Brazil	
11820	25.38	10/100/250		R. Free Europe, Germany	
	25.38	75		BBC London, Gt. Britian	
	25.38	50/100		R. Nederland, Holland	
	25.38	50		Murmansk, USSR	
	25.38	100		R. Abidjan, Ivory Coast	
	25.38	5/100		R. Clube de Moçambique	
	25.38	100		Dakar, Sénegal	
	25.38	240		Peking, China	
	25.38	7.5/100		BBC, Malaysia	
	25.38	50/260		TWR Bonaire, Neth. Antilles	
11825	25.37	50		R.Berlin Int,Germany(GDR)	
	25.37	25/100		Vatican Radio	
	25.37	100	ETLF	Addis Ababa, Ethiopia	
	25.37	50/100		Cairo, Un.Arab Rep.	
	25.37	25	BED69	Taipei(BCC), Taiwan	
	25.37	4		Papéete, Tahiti	
11830	25.36	50/100		R.Berlin Int,Germany(GDR)	
	25.36	10/100/250		R. Free Europe, Germany	
	25.36	100		Moscow, USSR	
	25.36	10/100	VUD	AIR Delhi, India	

kc	m	kW	Call	Stations & countries	Rem.
11830	25.36	7.5/100		BBC, Malaysia	
	25.36	7.5	ZL19	Wellington, New Zealand	
	25.36	100		Dixon, USA	
	25.36	250		Greenville, USA	
11835	25.35	50		Alma Ata, USSR	
	25.35	25/100		Vatican Radio	
	25.35	50		Alger, Algeria	
	25.35	35		Colombo(VOA), Ceylon	
	25.35	2.5	4VEJ	R. St. 4VEH, Haiti	
	25.35	5	CXA19	El Espectador, Uruguay	
11840	25.34	10/100/250		R. Free Europe, Germany	
	25.34	5/100		Warsaw, Poland	
	25.34	50/100	CSA31	R. Nacional, Portugal	
	25.34	10/100	VUD	AIR Delhi, India	
	25.34			Hanoi, Vietnam(Dem.Rep.)	
	25.34	100		R. Australia, Australia	
11845	25.33	100		Allouis, France	
	25.33	100		TWR Monaco	
	25.33	50		Kazan, USSR	
	25.33	10/100	VUD	AIR Delhi, India	
	25.33	100		Islamabad, Pakistan	
	25.33	500		Greenville, USA	
11850	25.32	10/120	LLK	R. Norway, Norway	
	25.32	50		Kazan, USSR	
	25.32	10/100	VUD	AIR Delhi, India	
	25.32	50		Ulan Bator, Mongolia	
	25.32	100		Honolulu(VOA), Hawaii	
	25.32	1	CE1185	R.Cruz del Sur, Uruguay	
	25.32	3	ZPA3	R. Teleco, Paraguay	
11855	25.31	10/100/250		R. Free Europe, Germany	
	25.31	50/100		Cairo, Un. Arab Rep.	
	25.31	10/100	VUD	AIR Delhi, India	
	25.31	20/200		R. Japan, Japan	
	25.31	50	DZH8	Call of the Orient, Philipp.	
	25.31	50		Jeddah, Saudi Arabia	
	25.31	50/80	WNYW	R. New York, USA	
	25.31	50		TWR Bonaire, N. Antilles	
11860	25.30	75		BBC London, Gt. Britain	
	25.30	100		Gorki, USSR	
	25.30	50	BED45	Taipei (BCC), Taiwan	
11865	25.28	50/60/100		R. Roma, Italy	
	25.28	100		Schwarzenburg, Switzerland	
	25.28	100		Lubumbashi, Congo D. Rep.	
	25.28	50		R. Afghanistan, Afghanistan	
	25.28	10/100	VUD	AIR Delhi, India	
	25.28	20/200		R. Japan, Japan	
	25.28	7.5/100		Dacca, Pakistan	
	25.28	10	PRA8	R. Cl. Pernambuco, Brazil	
11870	25.27	20/50		R. Liberty, Germany	
	25.27	10/50		Kaunas, USSR	
	25.27	50/100		Cairo, Un. Arab Rep.	
	25.27	50		Jeddah, Saudi Arabia	
	25.27	50/500		Greenville, USA	
11875	25.26	20/200		R. Japan, Japan	
	25.26	100		Beyrouth, Lebanon	
	25.26	10/50		Karachi, Pakistan	
	25.26	40	DYH6	Dumaguete City, Philipp.	
	25.26	100		Poro (VOA), Philippines	
	25.26	7.5	ZYN32	R. Soc. Bahia, Brazil	
11880	25.25	100		Hörby, Sweden	
	25.25	100		Schwarzenburg, Switzerland	
	25.25	50		Sverdlovsk, USSR	
	25.25	250		R. South Africa, So. Africa	
	25.25	7.5/100		BBC, Malaysia	
	25.25	50		R. Australia, Australia	
	25.25	10	VLH11	Melbourne, Australia	
	25.25	50/500		Greenville, USA	
	25.25	5	XEHH	R. Dif. Comerciales, Mexico	
	25.25	20	LRS	R. Splendid, Argentina	
11885	25.24	20	ORU5	Wavre, Belgium	
	25.24	100		Allouis, France	
	25.24	10/100/250		R. Free Europe, Germany	
	25.24	120		R. Bucharest, Rumania	
	25.24	10/50		Karachi, Pakistan	
	25.24	10	CXA68	R. Sarandi, Uruguay	
11890	25.23	100	DMQ11	Deutsche Welle, Germany	
	25.23	15/100		BBC London, Gt. Britain	
	25.23	50		Erevan, USSR	
	25.23	100	ETLF	Addis Ababa, Ethiopia	
	25.23	10/100	VUD	AIR Delhi, India	
	25.23	7.5/100		BBC, Malaysia	
	25.23	2		Call of the Orient, Philipp.	
	25.23	110		Bethany, USA	
11895	25.22	100		Vienna, Austria	
	25.22	100	ORU3	Wavre, Belgium	
	25.22	10/100/250		R. Free Europe, Germany	
	25.22	100		Dakar, Senegal	

kc	m	kW	Call	Stations & countries	Rem.
11895	25.22	10/100	VUD	AIR Delhi, India	
	25.22	5		Grenada, Windward Islands	
11900	25.21	10		Vienna, Austria	
	25.21	50		Sverdlovsk, USSR	
	25.21	100		Lagos (NBC), Nigeria	
	25.21	20/250		R. South Africa, So. Africa	
	25.21	100		R. Malaysia, Malaysia	
	25.21	5	CE1190	La Voz de Chile, Chile	
	25.21	20	CXA10	S.O.D.R.E, Uruguay	
11905	25.20	75/100		BBC London, Gt. Britain	
	25.20	50/60/100		R. Roma, Italy	
	25.20	250		Kigali (DW), Rwanda	
	25.20	7.5/100		BBC, Cyprus	
	25.20	10/100	VUD	AIR Delhi, India	
	25.20	3	BED44	Taipei (BCC), Taiwan	
11910	25.19	75/100		BBC London, Gt. Britain	
	25.19	5/135		R. Budapest, Hungary	
	25.19	10/100	VUD	AIR Delhi, India	
	25.19	100		Tel Aviv, Israel	
	25.19	100	HSK9	R. Thailand, Thailand	
	25.19	30	HCJB	La Voz de los Andes, Ecuad.	
11915	25.18	10/100/250		R. Free Europe, Germany	
	25.18	20/50		R. Liberty, Germany	
	25.16	50		Orenburg, USSR	
	25.18	50/100		Cairo, Un. Arab Rep.	
	25.18	10	PRC23	R. TV Gaucha, Brazil	
	25.18	30	HCJB	La Voz de los Andes, Ecuad.	
11920	25.17	100		Allouis, France	
	25.17	10/100	VUD	AIR Delhi, India	
	25.17	100		Beyrouth, Lebanon	
	25.17	7.5/100		BBC, Malaysia	
	25.17	40	DZF2	Call of the Orient, Philipp.	
	25.17	35/100		Okinawa (VOA), Ryukyu Isl.	
	25.17	100		Delano, USA	
11925	25.16	100	DMQ11	Deutsche Welle, Germany	
	25.16	75		BBC London, Gt. Britain	
	25.16	10		Emis. Nacional, Portugal	
	25.16	50		Dushanbe, USSR	
	25.16	50		Tashkent, USSR	
	25.16	100	ETLF	Addis Ababa, Ethiopia	
	25.16	50	HLK6	Seoul, Korea	
	25.16	10	ZYR78	R. Bandeirantes, Brazil	
11930	25.15	100	DMQ11	Deutsche Welle, Germany	
	25.15	10/100/250		R. Free Europe, Germany	
	25.15	50/100		R. Nederland, Holland	
	25.15	150		Moscow, USSR	
	25.15	50		R. Brazzaville, Congo	
	25.15	10/100	VUD	AIR Delhi, India	
	25.15	7.5/100		BBC, Malaysia	
	25.15	50		Malolos (VOA), Philipp.	
	25.15	50		Poro (VOA), Philipp.	
	25.15	120/240		R. Habana, Cuba	
11935	25.14	20/50		R. Liberty, Germany	
	25.14	50/100		R. Nederland, Holland	
	25.14	7.5	ZYS35	R. Cl. Paranaense, Brazil	
11940	25.13	10/100/250		R. Free Europe, Germany	
	25.13	120		R. Bucharest, Rumania	
	25.13	100		Krasnoyarsk, USSR	
	25.13	1	CR6SG	R. Cl. de Huíla, Angola	
	25.13	50/100		Cairo, Un. Arab Rep.	
	25.13	100		R. Japan, Japan	
	25.13	1/10/50		R. Kuwait, Kuwait	
	25.13	50		R. Singapura, Singapore	
	25.13	110		Bethany, USA	
11945	25.12	75		BBC London, Gt. Britain	
	25.12	250		Kigali (DW), Rwanda	
	25.12	240		Peking, China	
	25.12	5	ZPA5	R. Encarnación, Paraguay	
11950	25.10	50/100		R. Nederland, Holland	
	25.10	50		Kharkow, USSR	
	25.10	10/50		R. ELWA, Liberia	
	25.10	50		Riyadh, Saudi Arabia	
	25.10	7.5	PRL3	R. Dif. Educação, Brazil	
11955	25.09	75		BBC London, Gt. Britain	
	25.09	50/100		R Nederland, Holland	
	25.09	5/100		Warsaw, Poland	
	25.09	50		R. Afghanistan, Afghanistan	
	25.09	7.5/100		BBC, Malaysia	
	25.09	500		Greenville, USA	
11960	25.08	100		Praha, Czechoslovakia	
	25.08	100	DMQ11	Deutsche Welle, Germany	
	25.08	50/100		R. Nederland, Holland	
	25.08	100		TWR, Monaco	
	25.08	50		Serpukhov, USSR	
	25.08	50		Monrovia (VOA), Liberia	
	25.08	35/100		Tanger (VOA), Morocco	
	25.08	5	CE1196	R. Soc. Nac. de Mineria, Chi.	

kc	m	kW	Call	Stations & countries	Rem.
11965	25.07	100	DMQ11	Deutsche Welle, Germany	
	25.07	100		Schwarzenburg, Switzerland	
	25.07	100		Conakry, Guinea Rep.	
	25.07	20/200		R. Japan, Japan	
	25.07	50		Poro (VOA), Philippines	
	25.07	100		Okinawa (VOA), Ryukyu Is.	
	25.07	50/200		Delano, USA	
	25.07	50	PRB24	R. Record, Brazil	
11970	25.06	50		R. Sofia, Bulgaria	
	25.06	100		Allouis, France	
	25.06	20/50		R. Liberty, Germany	
	25.06	50/100		R. Nederland, Holland	
	25.06	4		R. Brazzaville, Congo	
	25.06	50		R. Tunis, Tunis	
	25.06	100		Amman, Jordan	
	25.06	3	BED37	Chiayi (BCC), Taiwan	
	25.06	50/80	WNYW	R. New York, USA	
	25.06	5		Grenada, Windward Islands	
11975	25.05	10/50		ELWA, Liberia	
11980	25.04	50		Komsomolsk, USSR	
	25.04	50/100		Cairo, Un. Arab Rep.	
11990	25.02	100		Praha, Czechoslovakia	
	25.02	50		Dushanbe, USSR	
				11995–15100 kc	
12000	25.00	100		Armavir, USSR	
**12005	24.99	10	VNG	Lyndhurst, Australia	
12010	24.98	20		Novosibirsk, USSR	
12015	24.97	50		Khabarovsk, USSR	
12020	24.96	100		Armavir, USSR	
12030	24.94	20		Novosibirsk, USSR	
12040	24.92	15/100		BBC London, Gt. Britain	
12050	24.90	50		Vinnitsa, USSR	
12058	24.88	2	PRB25	Agencia Nacional, Brazil	
12060	24.88	50		Moscow, USSR	
12070	24.86	100		Kiev, USSR	
12095	24.80	15/100		BBC London, Gt. Britain	
**12763	23.50	15	DAM	Elmshorn, Germany	
**12790	23.30		GKU5	Hailsham, Gt. Britain	
**12907	23.25	10	VHP5	Belconnen, Australia	
**13105	22.89		PPR	Rio de Janeiro, Brazil	
**13555	22.15		GIC33	Hailsham, Gt. Britain	
13750	21.82			Khabarovsk, USSR	
13830	21.69	20		Deragava (VUNC), Ryukyu I.	
**13873	21.62		FTN87	Paris, France	
14510	20.64	120/240		Pyongyang, Korea (D. Rep.)	
**14670	20.45	3	CHU	Dominion Observatory, Can.	
14690	20.43	20	PSF	Agencia Nacional, Brazil	
**15000	20.00	20	RWM	Moscow, USSR	
*	20.00		BPV	Peking, China	
*	20.00	2	JJY	Tokyo, Japan	
*	20.00	2	WWVH	Puunene, Hawaii	
*	20.00	10	WWV	Lanham, USA	
**	20.00	2	LOL	Buenos Aires, Argentina	
15044	19.94			Hanoi, Vietnam (Dem. Rep.)	
15060	19.92	240		Peking, China	
15070	19.91	15/100		BBC London, Gt. Britain	
15095	19.87	240		Peking, China	
				15100–15450 kc (19 m.b.)	
15100	19.87	100		Krasnoyarsk, USSR	
	19.87	10/50		Karachi, Pakistan	
15105	19.86	50/75		BBC London, Gt. Britain	
	19.86	10/100	VUD	AIR Delhi, India	
	19.86	100		R. Iran, Iran	
	19.86	100		R. Japan, Japan	
	19.86	5		Grenada, Windward Islands	
	19.86	7.5	ZYZ32	R. Rural Brasileira, Brazil	
15110	19.85	100		Kiev, USSR	
	19.85	7.5	ZL21	Wellington, New Zealand	
	19.85	1	XERR	R. Dif. Comerciales, Mexico	
15115	19.85	10/100/250		R. Free Europe, Germany	
	19.85	25/100		Vatican Radio	
	19.85	100	ETLF	Addis Ababa, Ethiopia	
	19.85	20/200		R. Japan, Japan	
	19.85	50		Jeddah, Saudi Arabia	
	19.85	5	CE1511	R. Soc. Nac. de Mineria, Ch.	
	19.85	1/30	HCJB	La Voz de los Andes, Ecuador	
15120	19.84	25/100		Vatican Radio	
	19.84	100		Honolulu (VOA), Hawaii	
15125	19.83	20/50		R. Liberty, Germany	
	19.83	50/100	CSA64	R. Nacional, Portugal	
	19.83	50	HLK41	Suwon, Korea	
	19.83	100	BED60	Taipei (BCC), Taiwan	
15130	19.83	100		Allouis, France	
	19.83	20/50		R. Liberty, Germany	
	19.83	100		Schwarzenburg, Switzerland	
	19.83	50		Simferopol, USSR	
	19.83	50/260		TWR Bonaire, N. Antilles	

kc	m	kW	Call	Stations & countries	Rem.
15130	19.83	50		Greenville, USA	
15135	19.82	100	DMQ15	Deutsche Welle, Germany	
	19.82	10/100/250		R. Free Europe, Germany	
	19.82	25/100		Vatican Radio	
	19.82	50/100		Cairo, Un. Arab Rep.	
	19.82	10/100	VUD	AIR Delhi, India	
	19.82	200		R. Japan, Japan	
	19.82	10	PRB23	R. Panamericana, Brazil	
15140	19.82	75/100		BBC London, Gt. Britain	
	19.82	100		Minsk, USSR	
	19.82	50		Petropavlovsk, USSR	
	19.82	50		Riazan, USSR	
	19.82	250		BBC, Ascencion Isl.	
15145	19.81	10/100/250		R. Free Europe, Germany	
	19.81	25/100		Vatican Radio	
	19.81	100		Islamabad, Pakistan	
	19.81	15	ZYK33	R. Jornal do Comercio, Braz.	
15148	19.80	5	CE1515	Corp. Chilena Broadc. Chile	
15150	19.80	50/60/100		R. Roma, Italy	
	19.80	100		Minsk, USSR	
	19.80	35/100		Tanger (VOA), Morocco	
	19.80	7.5	YDC	Djakarta, Indonesia	
	19.80	1/10/50		R. Kuwait, Kuwait	
	19.80	100		Jeddah, Saudi Arabia	
	19.80	100		Honolulu (VOA), Hawaii	
	19.80	15	OAX4T	R. Nacional, Peru	
15155	19.80	50		R. ELWA, Liberia	
	19.80	10/100	VUD	AIR Delhi, India	
	19.80	100		Poro (VOA), Philippines	
	19.80	25	ZYB9	R. Dif. de São Paulo, Brazil	
15160	19.79	100		Allouis, France	
	19.79	250		Woofferton (VOA), G. Brit.	
	19.79	50/100		R. Nederland, Holland	
	19.79	5/135		R. Budapest, Hungary	
	19.79	50		Moscow, USSR	
	19.79	10/100	VUD	AIR Delhi, India	
	19.79	100		Islamabad, Pakistan	
	19.79	100	TAU	R. Ankara, Turkey	
	19.79	110		Bethany, USA	
	19.79	10		Voz de la América Latina, M.	
15165	19.78	50	OZF7	R. Denmark, Denmark	
	19.78	10/100	VUD	AIR Delhi, India	
	19.78	1	ZYN7	R. Cl. de Ceará, Brazil	
15170	19.78	10/100/250		R. Free Europe, Germany	
	19.78	10/120	LKV	R. Norway, Norway	
	19.78	50		Blagovechensk, USSR	
	19.78	100		Amman, Jordan	
	19.78	10	TGWA	La Voz de Guatemala, Guat.	
15175	19.77	10/120	LLM	R. Norway, Norway	
	19.77	100		Lvov, USSR	
	19.77	20/200		R. Japan, Japan	
	19.77	50		Malolos (VOA), Philippines	
15180	19.76	75		BBC London, Gt. Britain	
	19.76	50/100		R. Nederland, Holland	
	19.76	50		Petropavlovsk, USSR	
	19.76	10/100	VUD	AIR Delhi, India	
	19.76	50		R. Australia, Australia	
15185	19.76	100	OIX4	Pori, Finland	
	19.76	10/100/250		R. Free Europe, Germany	
	19.76	50		Askhabad, USSR	
	19.76	10/100	VUD	AIR Delhi, India	
	19.76	35		Poro (VOA), Philippines	
15190	19.75	250		Woofferton (VOA), Gt. Brit.	
	19.75	50		Ivano-Frankovsk, USSR	
	19.75	50		R. Brazzaville, Congo	
	19.75	100/250		Accra, Ghana	
	19.75	10/100	VUD	AIR Delhi, India	
	19.75	50		R. Canada, Canada	
	19.75	10	PRK9	R. Inconfidencia, Brazil	
15195	19.74	10/100/250		R. Free Europe, Germany	
	19.74	100		Munich, (VOA), Germany	
	19.74	100		R. Japan, Japan	
15200	19.74	50		Kalatch, USSR	
	19.74	5	XEVOZ	R. Dif. XEVOZ, Mexico	
15205	19.73	100	DMQ15	Deutsche Welle, Germany	
	19.73	20/250		R. South Africa, So. Africa	
	19.73	35		Colombo, Ceylon	
	19.73	10/50		Karachi, Pakistan	
	19.73	500		Greenville, USA	
15210	19.72	100		Vienna, Austria	
	19.72	100		R. Berlin Int, Germ. (GDR)	
	19.72	100		Moscow, USSR	
	19.72	50/100		Cairo, Un. Arab Rep.	
	19.72	10/100	VUD	AIR Delhi, India	
	19.72	35/100		Poro (VOA), Philippines	
	19.72	3	ZPA7	R. Guarani, Paraguay	
15215	19.71	10/100/250		R. Free Europe, Germany	
15220	19.71	50/100		R. Nederland, Holland	
	19.71	50		Riga, USSR	
	19.71	20/250		R. South Africa, So. Africa	
	19.71	100		R. Australia, Australia	
	19.71	260		TWR Bonaire, N. Antilles	
15225	19.71	20/50		R. Liberty, Germany	
	19.71	50		R. Afghanistan, Afghanistan	
	19.71	10/100	VUD	AIR Delhi, India	
	19.71	20/200		R. Japan, Japan	
	19.71	10	ZYN30	R. Cult. de Bahia, Brazil	
	19.71	25	CXA64	La Voz de Melo, Uruguay	
15230	19.70	10/100	VUD	AIR Delhi, India	
	19.70	10	VLH15	Melbourne, Australia	
	19.70	2/10	DZH9	Call of the Orient, Philipp.	
	19.70	250		Greenville, USA	
	19.70	120/240		R. Habana, Cuba	
15235	19.69	15/100		BBC London, Gt. Britain	
	19.69	20/200		R. Japan, Japan	
	19.69	250		Greenville, USA	
15240	19.69	100		R. Berlin Int, Germ. (GDR)	
	19.69	50		Irkutsk, USSR	
	19.69	100		R. Belgrade, Yugoslavia	
	19.69	100	ETLF	Addis Ababa, Ethiopia	
	19.69	10		R. Australia, Australia	
	19.69	50		R. St. KGEI, USA	
15245	19.68	100		Allouis, France	
	19.68	5		R. Luxembourg, Luxemb.	
	19.68	250		Kigali (DW), Rwanda	
	19.68	250		Greenville, USA	
	19.68	50		TWR Bonaire, N. Antilles	
	19.68	10	ZYE21	R. Marajoára, Brazil	
15250	19.67	120		R. Bucharest, Rumania	
	19.67	50		Kazan, USSR	
	19.67	50/100		Malolos (VOA), Philippines	
	19.67	50/100		Poro (VOA), Philippines	
	19.67	250		Greenville, USA	
15255	19.66	10/100/250		R. Free Europe, Germany	
	19.66	100		Lagos (NBC), Nigeria	
15260	19.66	75/250		BBC London, Gt. Britain	
	19.66	50/100		Cairo, Un. Arab Rep.	
	19.66	7.5/100		BBC, Malaysia	
	19.66	1		Tokyo (FEN), Japan	
15265	19.66	10/100/250		R. Free Europe, Germany	
	19.66	50/80	WNYW	R. New York, USA	
	19.66	50	PRG9	R. Excelsior, Brazil	
15270	19.65	100		R. Berlin Int, Germ. (GDR)	
	19.65	250		Monrovia (VOA), Liberia	
	19.65	100		Tananarive, Malagasy Rep.	
	19.65	120/240		R. Habana, Cuba	
	19.55	1	CXA18	S.O.D.R.E, Uruguay	
15275	19.64	100	DMQ15	Deutsche Welle, Germany	
	19.64	5/100		Warsaw, Poland	
	19.64	100		Islamabad, Pakistan	
	19.64	50		Delano, USA	
15280	19.63	50		Serpukhov, USSR	
	19.63	3	BED36	Taipei (BCC), Taiwan	
	19.63	500		Greenville, USA	
15285	19.63	100		Praha, Czechoslovakia	
	19.63	25/100		Vatican Raido	
	19.63	100/250		Accra, Ghana	
	19.63	20/250		R. South Africa, So. Africa	
	19.63	10		Colombo (VOA), Ceylon	
	19.63	20/200		R. Japan, Japan	
15290	19.62	35/100		Tanger (VOA), Morocco	
	19.62	5/100		R. Clube de Moçambique	
	19.62	10/100	VUD	AIR Delhi, India	
	19.62	200		Dixon, USA	
	19.62	10	LRU	R. El Mundo, Argentina	
15295	19.62	100		Allouis, France	
	19.62	10/100/250		R. Free Europe, Germany	
	19.62	100	DMQ15	Deutsche Welle, Germany	
	19.62	50		Voronej, USSR	
	19.62	50		Tanger (VOA), Morocco	
	19.62	10	PRL8	R. Nacional Rio, Brazil	
15300	19.61	50/75		BBC London, Gt. Britain	
	19.61	100/200		R. Japan, Japan	
	19.61	2/10	DZH9	Call of the Orient, Philipp.	
	19.61	120/240		R. Habana, Cuba	
	19.61	5	CE1530	Soc. Nac. de Agricult, Chile	
15305	19.60	100		Schwarzenburg, Switzerland	
15310	19.60	100		Praha, Czechoslovakia	
	19.60	75		BBC London, Gt. Britain	
	19.60	50		Tula, USSR	
	19.60	7.5/100		BBC, Cyprus	
	19.60	10/100	VUD	AIR Delhi, India	
	19.60	20/200		R. Japan, Japan	
	19.60	7.5/100		BBC, Malaysia	

kc	m	kW	Call	Stations & countries	Rem.
15312	19.59	50		R. Sofia, Bulgaria	
15315	19.59	100	ETLF	Addis Ababa, Ethiopia	
	19.59	250		Monrovia (VOA), Liberia	
	19.59	100		Tanger (VOA), Morocco	
15320	19.58	50/100		R. Nederland, Holland	
	19.58	100		Schwarzenburg, Switzerland	
	19.58	100		Kazan, USSR	
	19.58	3	BED38	Chiayi (BCC), Taiwan	
	19.58	50		R. Canada, Canada	
15325	19.58	100		R. Berlin Int, Germ. (GDR)	
	19.58	50/60/100		R. Roma, Italy	
	19.58	100		R. Japan, Japan	
	19.58	30	HCJB	La Voz de los Andes, Ecuad.	
15330	19.57	100		Sverdlovsk, USSR	
	19.57	100		Colombo, Ceylon	
	19.57	7.5/100		BBC, Cyprus	
	19.57	100		R. Australia, Australia	
	19.57	110		Bethany, USA	
15335	19.56	20	ORU5	Wavre, Belgium	
	19.56	10	ZYU68	R. Soc. Farroupilha, Brazil	
15340	19.56	20/50		R. Liberty, Germany	
	19.56	120/240		R. Habana, Cuba	
15344	19.55	5	8FW2	Sukarnopura, Indonesia	
15345	19.55	10/100	LKU	R. Norway, Norway	
	19.55	50		Sebaa Aioun, Morocco	
	19.55	100		Amman, Jordan	
	19.55	50		Poro (VOA), Philippines	
	19.55	25	BED49	Taipei (BCC), Taiwan	
	19.55	50	LRA33	R. Nacional, Argentina	
15350	19.54	15/100		BBC London, Gt. Britain	
	19.54	100		Vologda, USSR	
	19.54	250		BBC, Ascencion Isl.	
	19.54	7.5/100		BBC, Malaysia	
15355	19.53	10/100/250		R. Free Europe, Germany	
15360	19.53	100		BBC London, Gt. Britain	
	19.53	100		Moscow, USSR	
	19.53	250		Monrovia (VOA), Liberia	
	19.53	50/100		Cairo, Un. Arab Rep.	
15365	19.52	10/100/250		R. Free Europe, Germany	
	19.52	35/100		Poro (VOA), Philippines	
	19.52	50		R. Canada, Canada	
	19.52	50/200		Delano, USA	
15370	19.52	20/50		R. Liberty, Germany	
	19.52	10	ZYC9	R. Tupi, Brazil	
15375	19.51	50		Ashkhabad, USSR	
	19.51	100		Leningrad, USSR	
15380	19.50	20/50		R. Liberty, Germany	
	19.50	120		R. Bucharest, Rumania	
	19.50	50		Tanger, Morocco	
	19.50	250		Kigali (DW), Rwanda	
	19.50	110		Bethany, USA	
15385	19.50	50/60/100		R. Roma, Italy	
	19.50	100		Gorki, USSR	
	19.50	100		Moscow, USSR	
	19.50	50/3	DZF3	Call of the Orient, Philipp.	
	19.50	110		Bethany, USA	
	19.50	10	CXA60	R. Sarandí, Uruguay	
15390	19.49	100		R. Berlin Int, Germ. (GDR)	
	19.49	75		BBC London, Gt. Britain	
	19.49	35/100		Tanger (VOA), Morocco	
	19.49	20/200		R. Japan, Japan	
	19.49	50		Call of the Orient, Philipp.	
15395	19.49	50		Poro (VOA), Philippines	
	19.49	100		Dixon, USA	
	19.49	500		Greenville, USA	
15400	19.48	50/60/100		R. Roma, Italy	
	19.48	100	ETLF	Addis Ababa, Ethiopia	
	19.48	250		Greenville, USA	
15405	19.47	100	DMQ15	Deutsche Welle, Germany	
	19.47	10/100/250		R. Free Europe, Germany	
	19.47	100		Kingisepp, USSR	
15406	19.47	5	PZC	R. Suriname, Surinam	
15410	19.47	20	OEI66	Vienna, Austria	
	19.47	100	ETLF	Addis Ababa, Ethiopia	
	19.47	10		Tanger, Morocco	
	19.47	100		Okinawa (VOA), Ryukyu Isl.	
	19.47	500		Greenville, USA	
15415	19.46	100		Kiev, USSR	
	19.46	500		Greenville, USA	
	19.46	1	ZYR206	R.Cl. Ribeirão Preto, Brazil	
15420	19.46	10/100/250		R. Free Europe, Germany	
	19.46	75		BBC London, Gt. Britain	
	19.46	100		R. Nacional, Spain	
	19.46	7.5/100		BBC, Cyprus	
	19.46	50	DYH7	Dumaguete City, Philippines	
15425	19.45	50/100		R. Nederland, Holland	
	19.45	120		Moscow, USSR	
15425	19.45	100	ETLF	Addis Ababa, Ethiopia	
	19.45	100		R. Japan, Japan	
	19.45	50	VLX15	Perth, Australia	
				15427–17700kc	
15430	19.44	100		Vienna, Austria	
	19.44	100		Schwarzenburg, Switzerland	
	19.44	10/100	VUD	AIR Delhi, India	
	19.44	50/250		Greenville, USA	
15435	19.44	75		BBC London, Gt. Britain	
	19.44	250		Kigali (DW), Rwanda	
	19.44			Peking, China	
	19.44	7.5/100		BBC, Malaysia	
15440	19.43	120		Riazan, USSR	
	19.43	100		Tashkent, USSR	
	19.43	10/3		Call of the Orient, Philipp.	
	19.43	50/80	WNYW	R. New York, USA	
15445	19.43	20/50		R. Liberty, Germany	
	19.43	50/100		R. Nederland, Holland	
	19.43	50		R. Brazzaville, Congo	
	19.43	250		Monrovia (VOA), Liberia	
	19.43	10	ZYN32	R. Nac. Brasilia, Brazil	
15448	19.42	100		Praha, Czechoslovakia	
15450	19.42	5	PZC	R. Suriname, Surinam	
15460	19.40	50		Krasnoyarsk, USSR	
	19.40	100		Moscow, USSR	
	19.40	10/50		Karachi, Pakistan	
15465	19.40	5	PZC	R. Suriname, Surinam	
15470	19.39	50		Kalinin, USSR	
15475	19.38	50/100		Cairo, Un. Arab Rep.	
15480	19.38	50		Irkutsk, USSR	
15490	19.36	50		Orenburg, USSR	
15505	19.35	50		Sverdlovsk, USSR	
15520	19.33	120/240		Pyongyang, Korea (Dem. R.)	
**16170	18.55		JAS22	Tokyo, Japan	
16250	18.46			Moscow, USSR	
**16980	17.67		DAM	Elmshorn, Germany	
**17194	17.45		PPR	Rio de Janeiro, Brazil	
17256	17.39	10	VHP6	Belconnen, Australia	
17630	17.02	7.5/10		Dacca, Pakistan	
17650	17.00	240		Peking, China	
17680	16.97	240		Peking, China	
**17685	16.96		GIC37	Hailsham, Gt. Britain	
17690	16.96	50/100		Cairo, Un. Arab Rep.	
17695	16.95	15/100		BBC London, Gt. Britain	
				17700–17900kc (16 metre band)	
17700	16.95	100		R. Berlin Int, Germ. (GDR)	
	16.95	50		Tallinn, USSR	
17705	16.94	75/100		BBC London, Gt. Britain	
	16.94	10/100	VUD	AIR Delhi, India	
	16.94	100		Honolulu (VOA), Hawaii	
	16.94	10	ZYR97	R. 9 de Julho, Brazil	
17710	16.94	100		Moscow, USSR	
	16.94	50/100		Cairo, Un. Arab Rep.	
	16.94	250		Greenville, USA	
17715	16.93	75/100		BBC London, Gt. Britain	
	16.93	10/100	VUD	AIR Delhi, India	
	16.93	50	DYH8	Dumaguete City, Philipp.	
	16.93	50		R. Australia, Australia	
	16.93	120/240		R. Habana, Cuba	
17720	16.93	20/50		R. Liberty, Germany	
	16.93	50		R. Brazzaville, Congo	
	16.93	10/100	VUD	AIR Delhi, India	
	16.93	50	BED39	Taipei (BCC), Taiwan	
	16.93	50	WINB	Red Lion, USA	
17725	16.93	10/100/250		R. Free Europe, Germany	
	16.93	100		R. Berlin Int, Germ. (GDR)	
	16.93	50/100		Cairo, Un. Arab Rep.	
	16.93	20/200		R. Japan, Japan	
	16.93	1	ZYR232	R. Universitaria, Brazil	
17730	16.92	1/100		Vienna, Austria	
	16.92	50		Serpukhov, USSR	
	16.92	50/80	WNYW	R. New York, USA	
17735	16.92	10/100/250		R. Free Europe, Germany	
	16.92	10/100	VUD	AIR Delhi, India	
	16.92	100		Dixon, USA	
17740	16.91	100		Allouis, France	
	16.91	100		Moscow, USSR	
	16.91	50/500		Greenville, USA	
17745	16.91	15/100		BBC London, Gt. Britain	
	16.91	50		Kursk, USSR	
	16.91	10/50		Karachi, Pakistan	
17750	16.90	100		Vienna, Austria	
	16.90	50/20		R. Liberty, Germany	
	16.90	1/50/100		R. Kuwait, Kuwait	
	16.90	10/100	VUD	AIR Delhi, India	
	16.90	10/50		Karachi, Pakistan	
	16.90	50		Poro (VOA), Philippines	

kc	m	kW	Call	Stations & countries	Rem.
17750	16.90	50/200		Greenville, USA	
17755	16.90	50/100		R. Berlin Int, Germ. (GDR.)	
	16.90	20/50		R. Liberty, Germany	
	16.90	10/120	LKW	R. Norway, Norway	
	16.90	100		Gorki, USSR	
	16.90	50/100		Cairo, Un. Arab Rep.	
	16.90	20/200		R. Japan, Japan	
	16.90	7.5/100		BBC, Malaysia	
	16.90	50/80	WNYW	R. New York, USA	
17760	16.89	50/20		R. Liberty, Germany	
	16.89	1		ELWA, Liberia	
	16.89	10/100	VUD	AIR Delhi, India	
17765	16.89	100		Allouis, France	
	16.89	50/100		R. Nederland, Holland	
	16.89	15		Tula, USSR	
	16.89	250		Kigali (DW), Rwanda	
	16.89	50		Malolos (VOA), Philippines	
	16.89	110		Bethany, USA	
	16.89	50		Dixon, USA	
17770	16.88	10/100/250		R. Free Europe, Germany	
	16.88	50/60/100		R. Roma, Italy	
	16.88	100		Schwarzenburg, Switzerland	
	16.88	50		Krasnoyarsk, USSR	
17775	16.88	50/20		R. Liberty, Germany	
	16.88	50/100		R. Nederland, Holland	
	16.88	50		Riazan, USSR	
	16.88	50/250		Monrovia (VOA), Liberia	
	16.88	10/100	VUD	AIR Delhi, India	
17780	16.87	50	BED95	Taipei (BCC), Taiwan	
	16.87	500		Greenville, USA	
17785	16.87	50		Frunze, USSR	
	16.87	50/100		Cairo, Un. Arab Rep.	
	16.87	100		R. Japan, Japan	
17790	16.86	75/100		BBC London, Gt. Britain	
17795	16.86	5/135		R. Budapest, Hungary	
	16.86	100		Armavir, USSR	
	16.86	20/200		R. Japan, Japan	
	16.86	35		Okinawa (VOA), Ryukyu I.	
	16.86	50/200		Dixon, USA	
	16.86	5		Manaus, Brazil	
17800	16.85	100		Vienna, Austria	
	16.85	50		R. Sofia, Bulgaria	
	16.85	250		Woofferton (VOA), Gt. Brit.	
	16.85	50/100		R. Nederland, Holland	
	16.85	50/60/100		R. Roma, Italy	
	16.85	100		Schwarzenburg Switzerland,	
	16.85	200		Delano, USA	
	16.85	250		Greenville, USA	
17805	16.85	10/100/250		R. Free Europe, Germany	
	16.85	20/250		R. South Africa, So. Africa	
	16.85	50/100		Cairo, Un. Arab Rep.	
17810	16.84	75		BBC London, Gt. Britain	
	16.84	50/100		R. Nederland, Holland	
	16.84	2	DZI6	Call of the Orient, Philipp.	
17815	16.84	50/100		R. Nederland, Holland	
	16.84	100		Simferopol, USSR	
	16.84	100		Tanger (VOA), Morocco	
	16.84	250		Kigali (DW), Rwanda	
	16.84	20/250		R. South Africa, So. Africa	
	16.84	10/100	VUD	AIR Delhi, India	
	16.84	10		R.Dif. de São Paulo, Brazil	
17820	16.84	100	ORU4	Wavre, Belgium	
	16.84	50/100		R. Berlin Int, Germ. (GDR)	
	16.84	100	TAV	R. Ankara, Turkey	
	16.84	35		Poro (VOA), Philippines	
	16.84	100		R. Australia, Australia	
	16.84	50		R. Canada, Canada	
	16.84	50/200		Delano, USA	
17825	16.83	100		Praha, Czechoslovakia	
	16.83	10/120	LLN	R. Norway, Norway	
	16.83	100		R. Japan, Japan	
17830	16.83	100	DMQ17	Deutsche Welle, Germany	
	16.83	50/100		R. Nederland, Holland	
	16.83	50/100		Poro (VOA), Philippines	
	16.83	250		Greenville, USA	
17835	16.82	10/100/250		R. Free Europe, Germany	
17840	16.82	10/100/250		R. Free Europe, Germany	
	16.82	50/100		R. Nederland, Holland	
	16.82	100		Hörby, Sweden	
	16.82	15		Moscow, USSR	
	16.82	25/100		Vatican Radio	
	16.82	100		R. Australia, Australia	
17845	16.81	20/100		Wavre, Belgium	
	16.81	100	DMQ17	Deutsche Welle, Germany	
	16.81	100		Schwarzenburg, Switzerland	
	16.81	50/80	WNYW	R. New York, USA	
17850	16.81	100		Allouis, France	

kc	m	kW	Call	Stations & countries	Rem.
17850	16.81	50		Moscow, USSR	
	16.81	35		Colombo, Ceylon	
	16.81	50/200		Dixon, USA	
17855	16.80	100		Vienna, Austria	
	16.80	10/100/250		R. Free Europe, Germany	
	16.80	250		Woofferton (VOA), Gt. Brit.	
	16.80	35		Tanger (VOA), Morocco	
	16.80	10/100	VUD	AIR Delhi, India	
	16.80	20/200		R. Japan, Japan	
	16.80	120/240		R. Habana, Cuba	
17860	16.80	20/100	ORU3/5	Wavre, Belgium	
	16.80	75		Munich (VOA), Germany	
	16.80	120		Tashkent, USSR	
17865	16.80	10/100/250		R. Free Europe, Germany	
	16.80	50/100		Cairo, Un. Arab Rep.	
17870	16.79	100	DMQ17	Deutsche Welle, Germany	
	16.79	50		Riazan, USSR	
	16.79	20/200		R. Japan, Japan	
	16.79	7.5/100		BBC, Malaysia	
	16.79	100		R. Australia, Australia	
17875	16.79	10/100/250		R. Free Europe, Germany	
	16.79	20/50		R. Liberty, Germany	
	16.79	250		Kigali (DW), Rwanda	
	16.79	20/200		R. Japan, Japan	
	16.79	250		Greenville, USA	
	16.79	7.5	PRL2	R.Dif. Educação, Brazil	
17880	16.78	50/100		R. Berlin Int, Germ. (GDR)	
	16.78	100	DMQ17	Deutsche Welle, Germany	
	16.78	50/100	CSA45	R. Nacional, Portugal	
	16.78	50		Petropavlovsk, USSR	
	16.78	25/100		Vatican Radio	
	16.78	7.5/100		BBC, Malaysia	
	16.78	30	HCJB	La Voz de los Andes, Ecuad.	
17885	16.78	10/100/250		R. Free Europe, Germany	
	16.78	7.5/100		BBC, Cyprus	
17890	16.77	5/135		R. Budapest, Hungary	
	16.77	10/100	VUD	AIR Delhi, India	
	16.77	100		Islamabad, Pakistan	
	16.77	50	BED40	Taipei (BCC), Taiwan	
	16.77	50		Greenville, USA	
	16.77	30	HCJB	La Voz de los Andes, Ecuad.	
17895	16.76	20/50		R. Liberty, Germany	
	16.76	50/100	CSA66	R. Nacional, Portugal	
	16.76	50		Kaunas, USSR	
	16.76	20/200		R. Japan, Japan	
				17910–21450kc	
17910	16.76	100/250		Accra, Ghana	
17920	16.74	50/100		Cairo, Un. Arab Rep.	
17950	16.71	100		Islamabad, Pakistan	
	16.71	10/50		Karachi, Pakistan	
18080	16.59	15/100		BBC London, Gt. Britain	
18150	16.53	15/100		BBC London, Gt. Britain	
**18895	15.94	8	OLD2	Praha, Czechoslovakia	
**19640	15.20		GIA39	Hailsham, Gt. Britain	
*20000	15.00	20	RWM	Moscow, USSR	
*	15.00	2.5	WWV	Lanham, USA	
				21450–21750kc (13 metre band)	
21450	13.99	100		Praha, Czechoslovakia	
21455	13.98	35		Tanger (VOA), Morocco	
21460	13.98	100		Schwarzenburg, Switzerland	
	13.98	100		Islamabad, Pakistan	
	13.98	50/200		Delano, USA	
21470	13.97	75/100		BBC London, Gt. Britain	
	13.97	50	DYH9	Dumaguete City, Philippines	
21475	13.97	50		Novosibirsk, USSR	
21480	13.97	50/100		R. Nederland, Holland	
21485	13.96	10/100/250		R. Free Europe, Germany	
	13.96	25/100		Vatican Radio	
	13.96	50/80	WNYW	R. New York, USA	
21495	13.96	50/100	CSA67	R. Nacional, Portugal	
	13.96	20/250		R. South Africa, So. Africa	
21500	13.95	2/50		R. Brazzaville, Congo	
	13.95	50/200		Delano, USA	
21505	13.94	50		Erevan, USSR	
21510	13.94	100	ORU4	Wavre, Belgium	
21520	13.94	100		Allouis, France	
	13.94	100		Schwarzenburg, Switzerland	
	13.94	20/200		R. Japan, Japan	
21525	13.94	1/10/50		R. Kuwait, Kuwait	
21530	13.93	75		BBC London, Gt. Britain	
	13.93	250		Woofferton (VOA), Gt. Brit.	
21535	13.93	1		R. ELWA, Liberia	
21540	13.93	100		Kursk, USSR	
	13.93	50		R. Australia, Australia	
21545	13.92	100/250		Accra, Ghana	
21550	13.92	75/100		BBC London, Gt. Britain	
21555	13.92	50/100		R. Berlin Int, Germ. (GDR)	

kc	m	kW	Call	Stations & countries	Rem.
21560	13.91	50/60/100		R. Roma, Italy	
	13.91	100		Schwarzenburg, Switzerland	
	13.91	50		Ashkhabad, USSR	
21565	13.91	50/100		R. Nederland, Holland	
21570	13.91	50/100		R. Nederland, Holland	
	13.91	100		Islamabad, Pakistan	
	13.91	50		Poro (VOA), Philippines	
21580	13.90	100		Allouis, France	
	13.90	10/100	VUD	AIR Delhi, India	
21585	13.90	120		Minsk, USSR	
21590	13.90	15/100		BBC London, Gt. Britain	
	13.90	50/250		Monrovia (VOA), Liberia	
	13.90	10/50		Karachi, Pakistan	
21595	13.89	50		R. Canada, Canada	
21600	13.89	10/100/250		R. Free Europe, Germany	
	13.89	100		Leningrad, USSR	
	13.89	50/500		Greenville, USA	
21610	13.88	15/100		BBC London, Gt. Britain	
	13.88	20/200		R. Japan, Japan	
	13.88	110		Bethany, USA	
21615	13.88	10/100	VUD	AIR Delhi, India	
21620	13.87	100		Allouis, France	
	13.87	10/100/250		R. Free Europe, Germany	
21625	13.87	50/100		R. Nederland, Holland	
	13.87	100		Kursk, USSR	
21630	13.87	75/100		BBC London, Gt. Britain	
	13.87	50/200		Dixon, USA	
21640	13.86	50		Baku, USSR	
	13.86	20/200		R. Japan, Japan	
21650	13.86	100	DMQ21	Deutsche Welle, Germany	
	13.86	15/100		BBC London, Gt. Britain	
	13.86	110		Bethany, USA	
21655	13.86	50		Kalatch, USSR	
	13.86	10/100	LKC	R. Norway, Norway	
21665	13.85	10/100/250		R. Free Europe, Germany	
	13.85	50/100		R. Nederland, Holland	
	13.85	5/135		R. Budapest, Hungary	
21670	13.84	5/10	LLP	R. Norway, Norway	
	13.84	50/250		Monrovia (VOA), Liberia	
21680	13.84	10/100/250		R. Free Europe, Germany	
	13.84	75/100		BBC London, Gt. Britain	
21685	13.83	5/135		R. Budapest, Hungary	
	13.83	7.5/10		Dacca, Pakistan	
21690	13.83	20	ORU5	Wavre, Belgium	
	13.83	100		Hörby, Sweden	
	13.83	50		Tashkent, USSR	
	13.83	100/250		Accra, Ghana	
	13.83	50		Tanger (VOA), Morocco	
21700	13.83	50/100	CSA46	R. Nacional, Portugal	
21710	13.83	75/100		BBC London, Gt. Britain	
21715	13.82	20/100		Wavre, Belgium	
	13.82	50/100		R. Nederland, Holland	
21720	13.81	10/100/250		R. Free Europe, Germany	
	13.81	100/250		Accra, Ghana	
21730	13.81	5/10	LLQ	R. Norway, Norway	
21735	13.81	50		Tashkent, USSR	
21740	13.80	50/500		Greenville, USA	
21745	13.80	10/100/250		R. Free Europe, Germany	
*25000	12.00	2.5	WWH	Lanham, USA	
		25600–26100kc (11 metre band)			
25610	11.71	50/100		R. Nederland, Holland	
25650	11.70	15/100		BBC London, Gt. Britain	
25670	11.67	15/100		BBC London, Gt. Britain	
25730	11.66	10/100	LLL	R. Norway, Norway	
25750	11.65	15/100		BBC London, Gt. Britain	
25900	11.58	5/10	LLA	R. Norway, Norway	
26040	11.52	50/100		R. Nederland, Holland	

INTERNATIONAL WATERS

RADIO CAROLINE (Comm.)
ADDR: P.O. Box 3, Ramsey, Isle of Man, or Caroline House, 6 Chesterfield Gardens, London W.1, England. **Te:** Hyde Park 9721 – **L.P:** Exec. Dir's: B. M. Ainley, R. O'Rahilly, P. R. Solomon.
STATIONS: M/V "Caroline" (R. Caroline North) anchored 4 miles off Ramsey Bay, Isle of Man: 1520kc 20kW – **D.PRGR: English:** 06.00–20.30 (Mon & Thurs 21.00, Sat 22.00, Sun 21.30); Test Prgr: 22.30–05.55 on 1169kc.
M/V "Mi Amigo" (R. Caroline South) anchored 4 miles off Frinton-on-Sea, Essex: 1187kc 50kW – **D.PRGR. in English:** 24 h.
ANN: "You are listening to the No. 1 station of the nation, Radio Caroline North"; "This is Radio Caroline on 259m" – **V.** by letter & QSL-card.

RADIO CITY (Comm.)
ADDR: 7 Denmark St, London W.C.2, England. **Te:** TEMple Bar 6303 – **L.P:** Dir. Gen: Mrs. D. Calvert.
STATION: Located on "A. A. Guntowers" at Shivering Sands in The Thames Estuary: 1034kc 20kW – **D.PRGR. in English:** 06.00–24.00. **N:** Every h on the h – **ANN:** "This is Radio City on 299m in the medium waveband" – **V.** by letter. Re. to Radio City, 7 Denmark Street, London W.C.2 – **F.PL:** Power encrase to 50–60kW.

RADIO LONDON (Comm.)
ADDR: Marine Investment Co. Inc, P.O. Box 456, Freeport, Grand Bahama Island, Bahamas – **L.P:** Man. Dir: Ph. T. Birch.
STATION: Located on the former U.S. minesweeper "Galaxy" anchored 4 miles off Frinton-on-Sea: 1133kc 75kW – **D.PRGR: in English:** 05.30–02.00. **N:** Every h on the half h. **Wrp:** Every half h. **ANN:** "This is Big L, Radio London" – **V.** by letter, Rp.

RADIO VERONICA (Comm).
ADDR: P.O. Box 218, Hilversum, Holland. Studio: Zeedijk 27A, Hilversum.
STATION: M/V "Veronica" anchored 6 miles west off "S Gravenhage" (The Hague):1562kc 5kW – **D.PRGR:** 06.00–24.00 – **Indonesian** (Thurs): 19.00–20.00, **Spanish** (Fri): 21.00–21.30, 21.00–21.30, **Italian** (Sat): 21.00–21.30, **Greek** (Sun): 20.30–21.00: Other times in Dutch. **ANN:** "Dit is R. Veronica op 192 meter" or "R. Veronica, Het station waar muziek in Zit" – **V.** by QSL-card.

RADIO DOLFIJN (Comm.)
ADDR: Verkoopmatschappi N, V, Amsteldijk 63, Amsterdam Z. Holland. **Te:** 760816 – **L.P:** Man. Dir: W. Vick.
STATION: M/V "Laissez-Faire" anchored 4½ miles off Frinton-on-Sea: 1322kc 55kW – **D.PRGR's in Dutch:** 05.00–23.00 – **N & Wrp:** Every h.

BRITAIN RADIO (Comm.)
ADDR: Peir-Vick Ltd, 17 Berkeley Street, London W.1. **Te:** MAYfair 3742 – **L.P:** Man. Dir: W. Vick.
STATION: M/V "Laissez-Faire" anchored 4½ miles off Frinton-on-Sea: 845kc 55kW – **D.PRGR's in English:** 24 h – **N & Wrp:** Every h.

RADIO ESSEX (Comm.)
ADDR: 33 Avenue Road, Southend-on-Sea, Essex, England – **L.P:** Dir: R. Bates.
STATION: John Tower in the Thames Estuary: 1349kc 1.75kW. **D.PRGR. in English:** 24 h – **ANN:** "This is the Voice of Essex broadc. 24 hrs a day on 222m medium wave" – **F.PL:** 10kW.

RADIO SCOTLAND (Comm.)
ADDR: Radio Scotland House, Cranworth Street, Glasgow W.2. **Te:** WEStern 9701/4 – **L.P:** Man. Dir: T. V. Shields.
STATION: M/V "Comet" anchored of Troon, Ayrshire: 1259kc 20kW.
D.PRGR's in English: 06.00–02.00 – **ANN:** "242m medium wave, this is Radio Scotland" – **V.** by QSL-card.

RADIO 270 (Comm.)
ADDR: 50 Cannon Street, London EC 4 – **L.P:** Chmn: L. H. Dale. Man. Dir: W. Proudfoot.
STATION: M/V "Ocean 7" anchored 4½ miles off Scarborough, Yorks: 1115kc 11kW – **D.PRGR's in English:** 06.30–01.00. **N:** Every h on the h – **ANN:** "This is Radio 270" – **V.** by QSL-card.

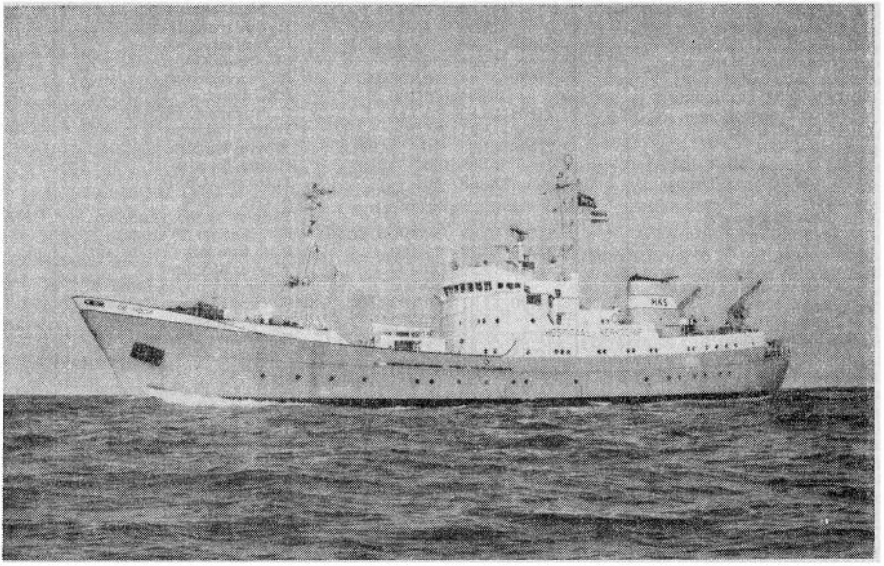
LAST MINUTE NEWS

ASCENCION ISLAND: The BBC relay st. is at press time reported using 15105, 15350, 15375, 17790kc.

BOLIVIA: R. Universidad, Tarija: CP85 5460kc 0.8kW: 12.00–18.00, 22.00–03.00.

BOTSWANA: BBC Francistown still operating at press time: 602/926kc (50kW), 4845/7295kc (10kW): On 602/926kc: 04.00–08.00, 09.45–20.45 (Sun 04.00–20.45); On 4845kc: 04.00–05.15, 16.45–20.45; On 7295kc: 05.15–08.00(Sun 09.45), 09.45–16.45.

BRAZIL: Short Waves: The following st's reported inactive at press time: ZYR226 5955kc, PRL5 5990kc, ZYB9 15155kc, ZYN7 15165kc, PRK9 15190kc, PRL8 15295kc, PRL2 17875kc – Amendments: ZYN6 6105kc 09.00–04.00; ZYK3 9565kc heard irregularly; ZYR96 9620kc 10.00–21.00; ZYV40 10.00–22.00; ZYR65 11745kc 09.00–24.00; ZYB8 11765kc; ZYK32 11825kc 09.30–02.00; ZYS35 11935kc 07.00–03.00; PRB23 15135kc heard irregularly. ZYE21 15245kc 11.00–22.30; PRG9 15265kc 11.00–21.30 (irr); ZYR97 17705kc 13.00–24.00.
Continued page 302



Hospitalchurchvessel "De Hoop" serving the fishing fleets of the different nations in the North Sea and around Iceland & Greenland.

VERENIGING HOSPITAALKERKSCHIP "DE HOOP" (Humane Undertaking)
ADDR: Head Office: Damrak 95, Amsterdam-C, Holland. **Te:** 244443. **Studio:** On board the ship or when home: Scheurhaven-Noordzeeweg, Europort, Holland. **Te:** 1888210 – **L.P:** Mgr: P. Broeksma. Dir: Captain W. F. Roog. Chief Engineer: Radio Operator: H. L. J. Distel. **STATIONS:** M/V "De Hoop": 2201kc 136.3m – 2316kc 129.5m 0.5kW.

Daily Transmitting Schedule: (when at sea): 05.45–05.55 on 2201kc gathering ships weatherreports (OBS) transmitting to Royal Dutch Weather Institute (K.N.M.I); 06.30–06.40 on 2316kc & 07.30–07.40 on 2201kc: Awaiting requests for assistance; 09.15–09.25 on 2201kc & 09.30–09.40 on 2316kc: Transmitting weather forecast for shipping; 11.45–11.55 on 2201kc: as 05.45; 12.15–12.25 on 2316kc: as 06.30; 15.15–15.25 on 2201kc & 15.30–15.40 on 2316kc: as 09.15; 17.45–17.55 on 2201kc: as 05.45; 18.30–18.40 on 2316kc & 19.30–19.40 on 2201kc: as 06.30.
Religious Sce's (from the chapel o/b) on 2316kc: Sun 09.30–10.30 & 17.45–18.30 Divine Sce. & hymn singing; Wed 18.30-19.00 Evening meditation.
Day & night is listened on the international emergency- and call-frequency 2182kc. Conversation with foreign ships are switched over on 2056kc.
All prgr's in Dutch; when giving assistance to foreign ships in English & German.

Preliminary Sailing Schedule 1967:
3/1–24/1 Irish Sea; 31/1–21/2, 28/2–21/3 & 28/3–18/4 Northern Northsea; 25/4–16/5, 23/5–13/6, 20/6–18/7, 1/8–22/8 & 29/8–19/9 Central Northsea; 26/9–17/10, 24/10–14/11 & 21/11–19/12 Irish Sea.

ANN: Dutch: "Hospitaalkerkschip "De Hoop"". E: "Hospital-churchvessel "De Hoop"". G: "Spital- und Kircheschiff "De Hoop churchvessel "De Hoop"". G: "Spital- und Kircheschiff "De Hoop"" – V. by letter. Rp. Recordings accepted, if free of charge –

FI: By private donations, churches, engine factories, shipowners and radio & navigation firms concerned. The Gov. guaranties interest and redemption of the loan financing.

LAST MINUTE NEWS *(Continued from page 301)*

CEYLON: R. Ceylon is considering a change in broadcast time but would like to know the views of their listeners, whether they consider the present times convenient, or whether they prefer alternate hours. Please write to: The Listeners Research Officer, Overseas Service of Radio Ceylon, P.O. Box 574, Colombo 7.

CHILE: R. El Carbón (CC157) reported operating on 4920kc; **R. Diego Portales** moved to 9570kc from 9560kc; CE1530 inactive.

CHINA (Peoples Rep. of): R. Peking: English: 08.30–10.00 to Pacific on 9457/11650/15060/15435/17735kc, 12.00–14.00 on 7115/7335/9480/11650/15060/15095kc, 14.00–16.00 on 7115/7315/9860/11740kc, 16.00–18.00 on 7315/9860/11725kc, 20.30–22.30 to Europe in 45, 42, 31 m.b, 00.00–02.55 to Eastern No. America on 9480/15060/17680kc (from 01.00 also on 11945/17745kc), 03.00–04.55 to Western No. America on 9457/11820/15095kc.

COLOMBIA: All shortwave outlets in 31, 25, 19, 16, 13 m.b. inactive at press time.

GREECE: FBS Athens (Central): L.P: Dir. Gen: Col. Tr. G. Apostolopoulos. Dir. Prgr: J. E. Kalogeratos. Home Sce. on 1142/6045kc: W 04.30–23.00, Sun 05.00–22.00.

HAITI: R. Lumière replaced 9635kc by new frequency 9565kc.

INDIA: Home News in English (on shortwaves):
01.10–01.15: On 3365, 3905, 4960, 6040, 7105, 7125, 9605, 11810kc (Delhi).
02.30–02.45: On 4990, 6050, 7105, 7195, 9730 11710, 11850, 15310kc (Delhi), 3223kc (Simla), 3315kc (Bhopal), 4920kc (Madras), 4800kc (Hyderabad), 4940kc (Gauhati), 3345kc (Jammu), 3277kc (Srinagar).
08.00–08.10: On 7120, 7290, 9705, 11715, 11910, 15105, 15185, 17720, 17760kc (Delhi), 7160kc (Madras).
15.30–15.45: On 3295, 3925, 4760, 6140, 6170, 7125, 7225, 7290, 9535, 10335kc (Delhi), 3268kc (Kohima), 3223kc (Simla), 3315kc (Bhopal), 4920kc (Madras), 4800kc (Hyderabad), 3375kc (Gauhati), 3345kc (Jammu), 3277kc (Srinagar), 3355kc (Kurseong).
17.00–17.05 (Sat 17.30–17.35): On 3925, 4760, 6140, 6170, 7225, 9535, 10335kc (Delhi).

KOREA (Peoples Dem. Rep): R. Pyongyang:
Home Sce: 1st Prgr: 20.00–15.00 on 725/785/6600/8290kc; 2nd Prgr: 08.00–11.00 on 1130kc – The Home Sce. prgr's are also broadc. to So. Korea: 1st Prgr: 20.00–17.00 on 800/850/3320/6250kc; 2nd Prgr: 20.00–17.00 on 655/685/735/4770/6400kc.
Foreign Sce: English: 20.00–21.00 on 6540/7580kc, 04.00–05.00 on 6540/15520kc, 08.00–09.00 on 6540/15520kc, 11.00–12.00 on 6480/7580kc, 14.00–15.00 on 6480/7580kc – French: 15.00–16.00 & 21.00–22.00 on 6540/7580kc – Indonesian: 10.00–11.00 on 6480/7580kc – Korean: 16.00–17.00 & 20.00–21.00 on 6540/7580kc, 00.00–01.00 on 11765/14510kc, 02.00–03.00 on 6540/15520kc – Spanish: 23.00–24.00 & 01.00–02.00 on 11765/14510kc – Chinese: 22.00–23.00 on 6540/11765kc, 12.00–13.00 on 6480/7580kc – Russian: 17.00–18.00 & 09.00–14.00 – Japanese: 21.00–03.00 & 03.00–14.00.

MALAGASY REPUBLIC: International Network: Test's: 08.00–11.00 irr. on 15265/17830kc (relay Malagasy Netw. 08.00–09.00, French Netw. 09.00–11.00). Ann: F: "Ici R. Madagascar chaine II". E: "This is the Malagasy Broadc. Station".

MEXICO: R.Dif. XEMP 11740kc: 13.00–04.00; XEWS *15160kc; XEVOZ *15200kc.

MOROCCO: R. Maroc: Foreign Sce: English 18.30–19.00, French 19.00–22.30, Spanish 22.30–23.30 on 7225/11735kc.

Continued page 303

WHERE TO OBTAIN THE WORLD RADIO TV HANDBOOK

Great Britain: Sole agents: Wm. Dawson and Sons Ltd, Cannon House, Macklin St, London W.C.2.
Angola: Argente Santos & Cia. Ltda, 32 Rua Duarte, Pacheo Pereira, Luanda.
Australia: Alberts Bookshop Pty. Ltd, 14–22 Forest Place, Perth, W.A. – Angus & Robertson Ltd, 89–95 Castlereagh St, Sydney, N.S.W. – Collin's Book Depot Ltd, 363 Swanston St, Melbourne, Vic – Dymocks Book Arcade Ltd, 424/426 George St, Sydney, N.S.W – Electronics Publications, 11 Cadow St, Pymble, N.S.W – Ell's Pty. Ltd, 116–118 Hunter Str, Newcastle, N.S.W – Grahame Book Co. Ltd, 39 Martin Place, Sydney, N.S.W – McGills Authorized Newsagency, 183–185 Elisabeth St, Melbourne, Vic – Mrs. D. Sanderson, 23 Elisabeth St, Malvern S.E.4, Vic – Standard Book Supplyers Pty, Ltd, 231 North Terrace, Adelaide, S.A – Technical Book and Magazine Co. Ltd, 295/299 Swanston St, Melbourne, Vic.
Austria: Wilhelm Braumüller & Sohn, Graben 22, Wien I – Buchhandlung Styria Dominikanerbastei 4, Wien 1 – Technischer Verlag ERB, Mariahilfer Str. 71, Wien.
Belgium: Agence et Messageries de la Presse, Rue de Persil 14a22, Bruxelles – Boekhandel Van den Bosch, St. Jacobsmarkt 1, Antwerpen. – Standaard Boekhandel, Hoek Naamse Str/St. Michielsstr. Leuven.
Brasil: Antenna – Emprêsa Jornalistica S.A., Travessa do Ouvidor No 39, Rio de Janeiro.
Canada: Burnill's Book Shop, 100 Yonge Str, Toronto 1 – Electro Sonic Supply Co. Ltd, Yonge Str, 543 Toronto, Ontario – Payette Radio Ltd, 730 St. James St. West, Montreal 3 – W. H. Smith & Son (Wholesale) Ltd, 113 Merton Street, Toronto 7 – Wolfe's Book Store, Box 205, Sudbury, Ont. – Darion International Company, P. O. Box 141, Stratford, Ontario.
Colombia: Italo Amore. Apt. Postal 1266, Bogota.
Cyprus: Minerva Bookshop, P.O. Box 470, Nicosia.
Denmark: Berlingske Forlag, 55, Rådhuspladsen, Copenhagen V.
Ethiopia: International Press Agency, P.O. Box 120, Addis Ababa.
Finland: Eric Gagneur, Högbergsgatan 22A 1, Helsingfors.
France: Messageries du Livre, 116 rue du Bac, Paris VII – Brentanos Ave de l'Opera 37, Paris 20 – Librairie Generale G. Labadie, 22, rue de Metz et 33, rue des Marchands, Toulouse.
German Federal Rep: Hermann Berendt, P.O. Box 341, 53 Bonn 1 – Boysen & Maasch, Ferdinandstr. 61, Hamburg 1. F. Büttner, Zeppelinstrasse (732) Göppingen – Buchhandlung Heinrich Gonski, Neumarkt 24, Köln – A. Graff Buchhandlung, Postfach 173, 33 Braunschweig – Hoffmann & Co, Hirschstrasse 4, 79 Ulm (Donau) – Gottfried Hübener, An der Mühle 34, 285 Bremerhaven G – Kiepert, Hardenbergstr. 4–5, Berlin, Charlottenburg – Hans Meschendörfer, Postfach 644, 8 München 33 – Peter Naacher, Frankfurt M, Süd 100 – Hans Heinrich Petersen, Rathausstr. 4, Hamburg 1 – Schmorl & von Seefeld Nachf, Postfach 5526, 3 Hannover – J. Schweitzer Sortiment, Ottostrasse 1A, München – The Stars & Stripes, Postfach 213, Darmstadt.
Greece: Anthony L. Coundakis, 56 Constantinople St, New Smyrna, Athens.
Hawaii: Honolulu Book Shops Ltd, 1022, Alaska Str, Honolulu 13.
Holland: Meulenhoff & Co. N.V, P.O. Box 196, Amsterdam – Brans & Co. Lijsterbeslaan 35, Hilversum – Dekker & Nordemann's Wetenschappelijke Boekhandel N.V, Voorburgwal 243, Amsterdam; Martinus Nijhoff, P.O. Box 269, The Hague – M. F. van Picre, Eindhoven – Sarnecki Brothers International Ltd, P.O. Box 993, Rotterdam/Pernis.
Hong Kong: Swindon Book Co, Mirador Mansion, 64 Nathan Rd, Kowloon.
Iceland: Innkaupasamband Boksala, P.O. Box 888, Reykjavik – Snæbjørn Jönsson & Co, P.O. Box 1131, Reykjavik – Boka- og Bladasalan, Box 100, Akureyri.
India: Hind Book House, P.O. Box 715, New Delhi.
Ireland: Eason & Son Ltd, 40–41 Lr. O'Connell St, Dublin; – Greene & Co, 16 Clare Str, Dublin 2.
Israel: ABC Bookstore Ltd, P.O. Box 1283, Tel Aviv.
Italy: Edizione Italiana, Via Arsenale 21, Torino – Sperling & Kupfer, Piazza S. Babila 1, Milano (210). – Libreria Internazionale Rizzoli, Largo Chigi, Roma.
Japan: Kyo Bun Kwan, 2 Ginza 4-chome, Tokyo.
Kenya: Minni Cine Films and Equipment, P.O. Box 1910, Nairobi.
Luxembourg: Paul Bruck, 22, Grand Rue, Luxembourg.
Malaysia: City Book Store (K.L. Ltd.), 67A Jalan Ampang, Kuala Lumpur.
Malta: Progress Press Co. Ltd, 341 St. Paul Str, Valetta.
Mexico: American Bookstore, S.A, Apt. Postal 79bis, Mexico, 1 DF.
Mozambique: Livraria Academica, Caixa Postal 1215, Lourenco Marques.
Neth. Antilles: Boekhandel Salas, P.O. Box 44, Curaçao. – De Wit Stores, Inc, 94 Nassau-Straat, Oranjestad, Aruba.
New Zealand: Arthur T. Cushen, 212, Earn Street, Invercargill – S.O.S. Radio Ltd, 283 Queen Street, Auckland – Technical Books Ltd, P.O. Box 5174, Wellington – Technical Books Ltd, P.O. Box 5402, Auckland.
Norway: F. Bruns Bokhandel, Trondheim – Johan Grundt Tanum, Karl Johansgt. 43, Oslo 1 – A/S Narvesens Litteraturtjeneste, Postbox 115, Oslo – Norsk Bokimport, Øvre Vollgate, Oslo.
Singapore: City Book Store Ltd, P.O. Box 653, Singapore – S. J. Alfred, G.P.O. Box 2672, Singapore 1.
Spain: Libreria Bosch, Ronda Universidad, 11, Barcelona – Libreria Hispano-Americana, Av. José Antonio 594, Barcelona – Libreria Tecnica Extranjera, Tuset 8–10, Barcelona 6.
Sweden: Importbokhandeln, Regeringsgatan 39, Stockholm C.
Switzerland: Naville & Cie, Rue Lévrier 5–7, 1200 Geneva – Librairie Payot, 40 rue du Marche, Geneva – Buchhandlung Plüss AG, Bahnhofstrasse 31, Zürich – K. Stäheli & Co, Bahnhofstr. 70, Zürich – H. Thali & Co. Hitzkirch – Wepf & Co. Eisengasse 5, Basel.
South Africa: Technical Books Ltd, P.O. Box 2866, Cape Town. – Magazine Centre (Pty.) Ltd, 92 Commissioner Str, Johannesburg.
USA: Gilfer Associates, P.O. Box 239, Park Ridge, New Jersey 07656.
WRTH Branch: 1270 Avenue of the Americas, New York, N.Y 10020.
USSR: Mezhdunarodnaja Kniga, Moscow G-200.
Venezuela: Distribuidora Santiago. Apt. 2589, Caracas.

In other countries at local booksellers or from World Radio TV Handbook Co. Ltd, Sundvej 6, Hellerup, Denmark.

LAST MINUTE NEWS

(Continued from page 302)

MOZAMBIQUE: R. Clube de Mocambique: A Prgr: 04.30–17.00 on 737/4925/6115/11820kc, 17.00–17.30 on 737/4925/11820kc, 17.30–21.00 on 737/3265/4925kc – **B Prgr:** 03.00–03.30 on 917/4855kc, 03.30–05.00 on 917/4855/6050/11780kc, 05.00–15.00 on 4855/6050/11780kc, 15.00–16.30 on 917/1358/4855/6050/11780kc, 16.30–17.00 on 917/1358/4855/11780kc, 17.00–18.00 on 917/1358/3218/4855/11780kc, 18.00–23.00 on 917/1358/3218/4855kc, 23.00–03.00 on 917/3218kc – **Religious Prgr's:** D 19.30–21.00 on 3338/4762kc, Sun also 04.30–05.00 on 4762/6180kc – **Porto Amelia:** Operates on 1421/5200/7102kc – **Nampula:** Operates on 1358/3355/4946/7130kc – **Quelimane:** Operates on 3210/4972/6160/7216kc.

PHILIPPINES: South East Asia Radio Voice: First antenna (by March 1967) beamed towards Thailand & Burma. Second antenna will be set up early 1968 for either Indonesia or Mainland China including Hong Kong and Taiwan. A second tr's of 250kW in 1970.

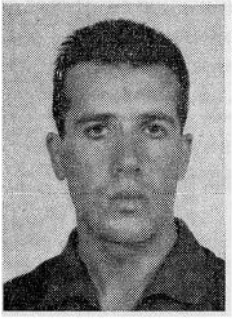
SOMALI (Rep): R. Mogadiscio on 4740/6095kc: Arabic: 03.00–03.15, 17.30–18.00 – Somali: 03.30–05.00, 08.00–11.30, 12.00–15.00, 16.30–17.30, 18.45–19.00.

SOUTH AFRICA: R. Safari (Priv): 157, Faraday Blvd, Vanderbijlpark, Tvl. **L.P:** Producer: R. Ginbey. **"DX Panorama"** a prgr. of N.

CO-OPERATORS

(see also page 241)

Miss
Koyungja Yea
Sindang Dong 349-66
Seoul, Rep. of Korea



Alain Descrières
B.P. 1043, Bamako,
Mali

Cecar Objio
Calle Duvergé 24, Sur
Bani, Dom. Rep.

A DIRECTORY OF THE ADVERTISERS

ABC International Television Inc, New York, USA 245
Adair, George P, Engineering Company, Washington 6 DC, USA 201
Agfa Gevaert N.V, Mortsel, Antwerp, Belgium..... 67
Akustische u. Kino-Geräte Gesellschaft m.b.H, Vienna XV, Austria 3rd cover page.
All India Radio, New Delhi, India..... 161
Amalgamated Wireless (Australasia) Ltd, Sydney, Australia 43
Amos of Exeter, England..... 47
Ampex International, Reading, England 17, 81
Apparecchiature Elettroniche, Torino, Italy..... 64
Asahi Broadcasting Corp., Osaka, Japan..... 167
Audio Devices Inc, New York, N.Y, USA..... 49
Australian Broadcasting Commission, Melbourne, Australia 181
Bauer Electronics, New York, USA..... 32
British Broadcasting Corp, England..... 2nd cover page, 72
Brown, Boveri & Company, Ltd, Baden, Switzerland..... 51
Canadian Broadcasting Corp., Montreal, Canada 191
CBS Laboratories, USA..... 11
CCA Electronics Corporation, USA..... 21
Colorado Video, USA..... 34
Compagnie Francaise Thomson-Houston, Paris VIII, France Back page
Continental Electronics Mfg. Co, USA 37, 71
Deutsche Welle, Cologne, German Fed. Rep..... 97
Deutscher Demokratischer Rundfunk, Berlin, German Dem. Rep. 103
Drake Co, R. L., Miamisburg, Ohio USA 203
E.M.I. Electronics Ltd, Hayes, Middlesex, England..... 249
European Broadcasting Union (EBU), Belgium, Switzerland 89
Fabbrica Apparecchi Radio E Televisione S.p.A. Roma, Italy 73
Fabbrica Italiana Apparecchi Radio, Milano, Italy 52
Fernseh G.m.b.H, Darmstadt, Germany..... 35
Finnish Broadcasting Co, Helsinki, Finland 93
Greater Publications Pty, Sydney, Australia..... 183
International General Electric, USA..... 13
International Radio and Television Organization (OIRT), Prague, Czechoslovakia 104
International Radio and Television Society, Inc, New York, U.S.A. 192
Kathrein Antennen, Rosenheim, W. Germany 59
Kovo, Prague, Czechoslovakia 69
Laboratoire General des Telecommunications (LGT), St. Cloud, France..... 1
Libyan Broadcasting Service, Tripoli, Libya..... 146
Loftleidir, Copenhagen, Denmark..... 113
The Marconi Company Limited, Chelmsford, England..... 45
Mc Martin Industries, New York, NY, USA..... 41
Microwave Associates Inc, USA..... 242
Minnesota Mining and Mfg. Co, USA..... 23
National Radio Company Inc, USA..... 193
Neumann, Georg, Berlin S.W. 61, German Fed. Rep..... 3
Neve & Co, Rupert, Cambridge, England..... 53
New Zealand Broadcasting Corpo, Wellington, New Zealand 187
Nippon Electric Company Ltd, Tokyo, Japan..... 6
Nippon Hoso Kyokai, Japan Broadcasting Corp., Tokyo, Japan.. 165
Norwegian Broadcasting Corp., Oslo, Norway..... 117
OCORA (Office de Cooperation Radiophonique), Paris 9e, France 95
Pacific Broadcasting Corp., Guam..... 259
Philips, Eindhoven, Hilversum, Holland..... 8, 9, 39
Polskie Radio i Telewizja (Polish Radio and Television), Warsaw, Poland..... 78
Radio Bucharest, Bucharest, Rumania..... 121
Radio Budapest, Budapest, Hungary 111
Radio Clube de Mozambique, Lourenco Marques, Mozambique.. 149
Radio Corporation of America, USA..... 24, 25, 31
Radio Denmark, The Voice of Denmark, Copenhagen V, Denmark 91
Radio Iran, Ministry of Information, Teheran, Iran..... 163
Radio Malaysia, Kuala Lumpur, Malaysia..... 171
Radio Moscow, Moscow, USSR..... 133
Radionette, Oslo, Norway..... 5
Radio Portugal, Lisbon, Portugal..... 119
Radio Prague, Prague, Czechoslovakia..... 79
Radiotelevisione Italiana (RAI), Rome, Italy 63
Radio Voice of the Gospel, Addis Ababa, Ethiopia..... 145
Riker Industries, New York, NY, USA 29
Seven Arts Productions International, USA..... 263
Shure Brothers Inc, Export Department, Evanston Ill, USA 15, 61, 77
Singer Products Company Inc, New York 4, N.Y, USA 19, 58
Sony, Tokyo, Japan..... 65
Standard Telephones and Cables, London, England 27
Stanmark Productions Ltd, London, England 197
Swedish Broadcasting Corp, Radio Sweden, Stockholm 1, Sweden..... 125, 127
Swiss Broadcasting Corp, Berne, Switzerland..... 129
Telecommunications Journal ITU, Geneva, Switzerland..... 151
Tele-Projects Inc, New York, N.Y, USA..... 33
Telesco International Corp., New York, N.Y, USA 20
Television International Enterprises Ltd, London, England..... 75
Tokyo Shibaura Electric Co. Ltd, Tokyo, Japan 55
Trans World Radio, Bonaire, Neth. Antilles..... 216
Voice of America, U.S. Information Agency, Washington D.C. 20547 USA 199
Voice of Andes (HCJB), International Missionary Station, Quito, Ecuador 233
Voice of Free China (BCC), Taipei, Taiwan..... 159
Westrex Ltd, Manchester, England..... 253
Wiener Schwachstromwerke G.m.b.H, Wien, Austria 56, 57
World Publications, Lindorffsallé 1, Hellerup, Denmark 82, 139, 195

ADVERTISING REPRESENTATIVES

Austria: Ing. Dr. Johann Lingl, Wien III, Reisnerstr. 4, Tel.: 733398. Telex: 01-2508.
Brazil: L. de F. Torres, Trans-TV, Rua Alvaro Muller 726, Campinas, São Paulo.
France: Regie-Presse, Division Internationale, 133 Champs Elysées, Paris 8è. Tel: Balzac 12-91.
Germany: Dr. Günter Wolff & Co. 2 Hamburg 64, Barkenkoppel 31. Tel: (04M)-526 5555/56.
Gt. Britain: F. A. Smyth and Associates Ltd., International Publishers Representatives, Dover Street, London W.1. Tel: (01) 629-2780.
Holland: G. Arnold Teesing, Representative of Foreign Newspapers and Periodicals, Rubensstraat 68, Amsterdam Z. Tel: 72794 3.
Hungary: Presto, Foreign Trading Publicity Co. Ltd. Budapest 5, P.O. Box 120. Tel: 180-282, 181-705.
Italy: Publicitas S.p.A, Via E. Filiberto 4, Milano. Tel: 348.541-316-051.
Japan: Kyo Bun Kwan Jigyosha, Ltd., 2 Ginza 4-chome, Chuoku. Cable: Kyobunkwan, Tokyo. Tel: 561-9691-4.
Singapore: S. J. Alfred, G.P.O. Box 2672, Singapore 1. Tel: 45276. Cable: "Alfredo Singapore".
Switzerland: Annoncen-Service Post AG., Wydäckerring 140, 8087 Zürich or Postfach, 8055 Zürich. Tel: 051/545050. Cable: Annoncen-service, Zürich.
Sweden: Claes-W. Englund, Agenturer, Stockholmsvägen 41, Eneby-berg. Tel: 02-7587513.
USA: World Radio TV Handbook, 1270 Avenue of the Americas, New York, N.Y. 10020, Tel: CI 7-7660.

SET COUNT BY COUNTRY

(Continued from page 74)

Country	Po.	R.Rcvrs.	TV Rcvrs.
Upper Volta	4.955.000	50.000	500
*Uruguay	2.914.000	1.000.000	200.000
USSR	225.000.000	65.000.000	12.500.000
Vatican State	1.000	—	—
*Venezuela	8.260.000	1.675.000	650.000
Vietnam Rep.	14.929.000	300.000	—
Vietnam (Dem. Rep.)	17.000.000	500.000	—
*Virgin Isl. (American)	45.000	30.000	8.500
*Windward Isl.	372.000	22.000	—
Yugoslavia	19.758.000	2.910.712	680.697
Zambia	3.780.000	50.000	20.000
Zanzibar (Tanzania)	320.000	12.000	—

a=Radio Homes – b=TV Homes – [1]=incl. Azores.

LAST MINUTE NEWS

(Continued from page 303)

music & features aired 6 times a year over R. Portugal, Lisbon (100/135kW): 07.45 to Australia/N. Zealand, 08.30 to Japan/Far East, 13.50 to So. Ea. Asia, 18.30 to Africa, 20.30 to Europe, 23.00 to Europe, 02.15 to USA, 03.15 to Canada – V. by QSL-card.

SWITZERLAND: Test broadcasts from the Radiocommunications Service of the International Committee of the Red Cross in French, English & Spanish: Jan 23, 25, 27, March 13, 15, 17, May 22, 24, 26, July 17, 19, 21, Sept 18, 20, 22, Nov 20, 22, 24 each day at 06.00–07.00, 11.30–12.30, 15.00–16.00 & 23.00–24.00 on 7210kc – **SBC:** R. Beromünster 529kc 250kW (to be increased to 500kW in 1967) now announces "Hier ist das Schweizer Radio".

TANZANIA: R. Tanzania: External Sce. testing irr. on one or more of the following freq's: 5985, 7100, 9550, 11765, 15435, 17780, 21600kc (the latter measured as 21595kc). Reg. prgr. in Swahili for Ea. Africa: 09.00–11.00 on 9550kc.

VENEZUELA: Ondas del Lago YVME on 4800kc now inactive.

TELEVISION: Surinam: Surinaamse Televisie Stichting (STVS) has started operation and broadcasts 23 hrs weekly to the population of Paramaribo.

PRINTED IN DENMARK

They are discussing all the complex problems of fine music recording . . . . and they know of the delicate influence microphones have . . . and they come to select microphones from Vienna (where they know the true sound of music) . . .

. . . such as C 24 . . . C 12A . . . . . C 28/29/30 C . . . . C 61 . . . . D 202 . . . . . D 24 . . . . . D 20 . . . . . D 119

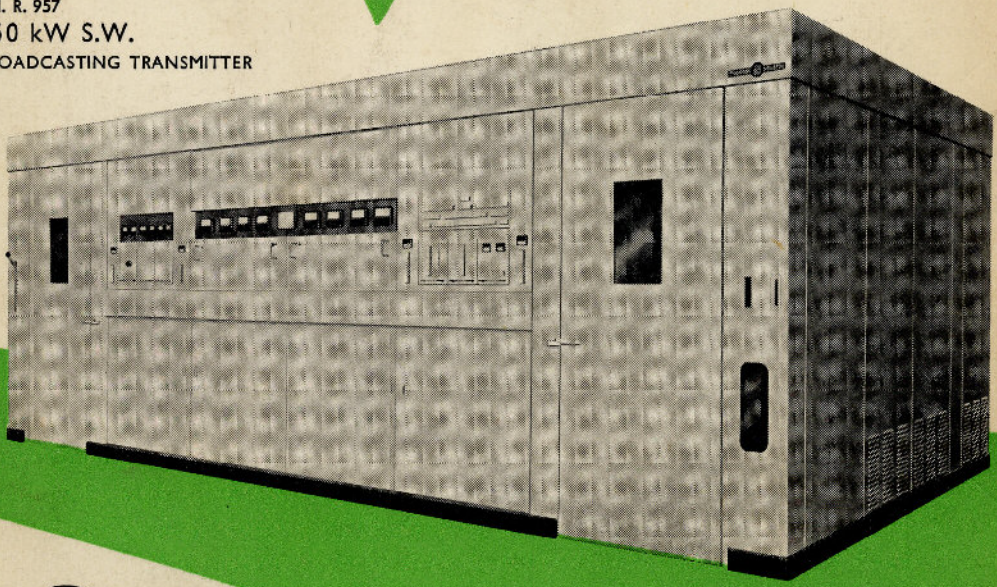
MICROPHONES

Vienna XV, Nobilegasse 50 — Austria

Printed in Denmark

VERY HIGH POWER BROADCASTING TRANSMITTERS

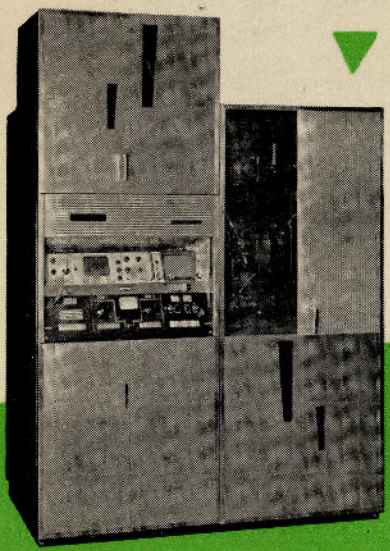
TH. R. 957
350 kW S.W.
BROADCASTING TRANSMITTER



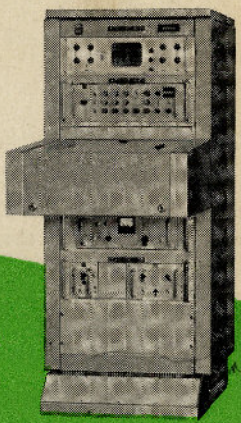
THOMSON CFTH HOUSTON

TELEVISION TRANSMITTERS BAND III-IV AND V

FILM AND SLIDE COLOR TELEVISION EQUIPMENT



TH. T. 2300
35 mm COLOR FLYING SPOT
TELECINE
FULLY TRANSISTORIZED



TH. T. 2100
COLOR FLYING SPOT
SCANNER
FULLY TRANSISTORIZED

COMPAGNIE FRANCAISE
THOMSON HOUSTON-HOTCHKISS BRANDT | SOCIÉTÉ ANONYME AU CAPITAL DE 239 580 000 F
R.C. SEINE 54 B 8975 INSEE N° 283 75 108 0098

DIVISION RADIODIFFUSION · TÉLÉVISION · ÉMISSION · 119 rue du Fossé-Blanc · 92. Gennevilliers France · Tel. 473-33-05